EXHIBIT B

Service: Get by LEXSEE®
Citation: 2005 U.S. Dist. LEXIS 21042

*2005 U.S. Dist. LEXIS 21042, **

BAYER HEALTHCARE LLC, Plaintiff, v. ABBOTT LABORATORIES, Defendant.

C.A. No. 03-189-GMS

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

2005 U.S. Dist. LEXIS 21042

September 26, 2005, Decided

PRIOR HISTORY: Bayer Healthcare LLC v. Abbott Labs., 2004 U.S. Dist. LEXIS 25087 (D. Del., Dec. 10, 2004)

CASE SUMMARY

PROCEDURAL POSTURE: Plaintiff health care company filed suit for patent infringement against defendant health care company. Defendant sought summary judgment of non-infringement as to all four patent-infringement claims asserted against it.

OVERVIEW: Plaintiff alleged that defendant infringed its patents with its product, a machine that detected the presence of chemicals in bodily fluid samples. Plaintiff's machine read bar codes off of rotating containers, and defendant's machine did so in a different way. The court found that in the context of a motion brought by an alleged infringer, summary judgment would be granted if one limitation of the claim did not read on an element of the accused product, either literally or under the doctrine of equivalents. Plaintiff claimed that the sprocket of defendant's machine corresponded to the circular gear, but that was the precise chaining-and-sprocket structure plaintiff had expressly relinquished during prior prosecution, thus the court granted summary judgment to defendant on the literal infringement claim. The court was not persuaded by defendant's argument that summary judgment should be granted under the doctrine of equivalents on grounds that its product's bar code scanning method did not perform substantially the same function. The court found that plaintiff's expert raised disputed issues of material fact as to "function, way, and result," thus it denied defendant's motion.

OUTCOME: The court granted the motion in part and denied the motion in part.

CORE TERMS: gear, container, rotation, axis, reagent, satellite, collet, circular, examiner, bar code, assembly, patent, sprocket, scanning, redesigned, vertical, tray, cap, ring gear, ring, beam, chain, summary judgment, concentric, cylinder, rear, axes, infringement, invention, insert

LexisNexis(R) Headnotes ♦ Hide Headnotes

Civil Procedure > Summary Judgment > Standards > Genuine Disputes
Civil Procedure > Summary Judgment > Standards > Materiality

HN1 Summary judgment is appropriate if, drawing all factual inferences in favor of the nonmoving party, there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law. More Like This Headnote

Civil Procedure > Summary Judgment > Standards > General Overview
Patent Law > Infringement Actions > Summary Judgment > Claim Evaluation

HN2 In the context of patent infringement, the court decides whether summary judgment is appropriate by first construing the disputed claim terms, and then applying that construction to the accused product. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Construction Preferences

HN3 Claim construction is a matter of law to be decided by the court. More Like This Headnote

Patent Law > Claims & Specifications > Enablement Requirement > General Overview
Patent Law > Infringement Actions > Claim Interpretation > General Overview

HN4 The court must begin its analysis by inquiring how a person of ordinary skill in the art at the time of the invention would have defined the disputed claim terms. Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > General Overview

HN5 The first and most obvious source for the meaning of a claim term is the claim language itself. The second source is the specification, for it is the single best guide to the meaning of a disputed term. The third source of great value is the prosecution history. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Aids

HN6 It can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be. These three sources, the claim language, the specification, and the prosecution history, constitute what is known as "intrinsic evidence." Also helpful are sources known as "extrinsic evidence," including dictionaries and expert testimony. However, extrinsic evidence is generally less reliable than the patent and its prosecution history in determining how to read claim terms. Thus, extrinsic evidence should be discounted when it is at odds with the intrinsic evidence. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Aids

HN7 The prosecution history of a patent serves an important public-notice function because it is a written record of both the inventor's understanding of the invention, and the limitations the inventor may have placed on the invention in order to distinguish it from prior art. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Aids

HN8 Courts refer to the prosecution history, when it is of record, to discern the applicant's express acquiescence with or distinction of the prior art as further indication of the scope of the claims. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Aids

HN9 As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made during prosecution. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Aids

HN10 There is a "heavy presumption" that claim terms carry their full ordinary and customary meaning. Thus, the doctrine of prosecution disclaimer may not be invoked where the alleged disavowal of claim scope is ambiguous. Rather, the "heavy presumption" can be overcome only if the patentee unequivocally imparted a novel meaning to those terms or expressly relinquished claim scope during prosecution. Consequently, for prosecution disclaimer to attach, federal circuit precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Aids

HN11 The prosecution history of a related patent can be relevant if, for example, it addresses a limitation in common with the patent in suit. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Construction Preferences

HN12 Courts presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Claim Differentiation
Patent Law > Infringement Actions > Claim Interpretation > Construction Preferences
Patent Law > Infringement Actions > Summary Judgment > Claim Evaluation

HN13 After claim construction disputes are resolved, the court must evaluate whether summary judgment is appropriate. More Like This Headnote

Patent Law > Infringement Actions > Doctrine of Equivalents > General Overview
Patent Law > Infringement Actions > Summary Judgment > Claim Evaluation

HN14 In the context of a motion brought by the alleged infringer, summary judgment will be granted if one limitation of the claim in question does not read on an element of the accused product, either literally or under the doctrine of equivalents. However, a patentee cannot recapture through the doctrine of equivalents subject matter already precluded by the doctrine of prosecution disclaimer. Therefore, if the accused product does not literally infringe the patent because of prosecution disclaimer, the court need not engage in a doctrine-of-equivalents analysis. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Scope

HN15 Application of the doctrine of prosecution disclaimer is not limited to the construction of isolated terms. Rather, it can be invoked if the patentee unequivocally imparted a novel meaning to those terms or expressly relinquished claim scope during prosecution. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Construction Preferences

HN16 Courts presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning. More Like This Headnote

Patent Law > Infringement Actions > Claim Interpretation > Scope
Patent Law > Infringement Actions > Doctrine of Equivalents > Elements > Equivalence
Patent Law > Infringement Actions > Prosecution History Estoppel > General Overview

HN17 When a court applies the doctrine of argument-based estoppel to limit the scope of equivalents, a close examination must be made as to, not only what was surrendered, but also the reason for such a surrender. More Like This Headnote

Patent Law > Infringement Actions > Prosecution History Estoppel > General Overview

HN18 The court must examine the character of assertions made in the prosecution history

in addition to the result of those assertions, i.e., whether they result in allowance, when determining whether they create an estoppel. More Like This Headnote

Patent Law > Infringement Actions > Doctrine of Equivalents > General Overview

HN19 While it is true that the doctrine of equivalents may not be used to capture subject matter clearly excluded from the claims whether the exclusion is express or implied, the doctrine of specific exclusion must be applied with care, lest it be allowed to swallow the doctrine of equivalents in its entirety. More Like This Headnote

Patent Law > Infringement Actions > General Overview

HN20 Generally speaking, efficiency considerations do not enter into the infringement analysis. More Like This Headnote

COUNSEL: **[*1]** For Bayer Healthcare LLC, Plaintiff: Jeffrey B. Bove, James D. Heisman, Connolly, Bove, Lodge & Hutz, Wilmington, DE; Albert J. Marcellino, Dale M. Heist, Gary H. Levin, Pro Hac Vice.

For Abbott Laboratories, Defendant: Mary B. Graham, James Walter Parrett, Jr., Morris, Nichols, Arsht & Tunnell, Wilmington, DE.

For Bayer Corporation, Counter Defendant: Jeffrey B. Bove, Rudolf E. Hutz, Connolly, Bove, Lodge & Hutz, Wilmington, DE.

For Abbott Laboratories, Counter Claimant: Mary B. Graham, Morris, Nichols, Arsht & Tunnell, Wilmington, DE.

For Bayer Healthcare LLC, Counter Defendant: Jeffrey B. Bove, Connolly, Bove, Lodge & Hutz, Wilmington, DE.

JUDGES: Gregory M. Sleet, UNITED STATES DISTRICT JUDGE.

OPINION BY: Gregory M. Sleet

OPINION: MEMORANDUM

I. INTRODUCTION

The above-captioned action is a suit for patent infringement in which Bayer Healthcare LLC ("Bayer") accuses Abbott Laboratories ("Abbott") of infringing several patents with its Architect immunoassay analyzer. Although Abbott denies that the Architect, as originally designed, infringes most of the asserted patents, n1 Abbott undertook to redesign the Architect in an attempt to definitively avoid Bayer's **[*2]** patents. Bayer, however, believes the redesigned Architect still infringes independent claim 9 of U.S. Patent No. 6,436,349 ("the '349 patent") and dependent claims 16, 18, and 21 of U.S. Patent No. 6,498,037 ("the '037 patent"). Presently before the court is Abbott's motion for summary judgment of non-infringement as to all four claims asserted against the redesigned Architect. (D.I. 299.) For the following reasons, Abbott's motion will be granted in part and denied in part.

- - - - - - - - - - - - - - - Footnotes - - - - - - - - - - - - - - -

n1 On December 30, 2004, the court granted Bayer's unopposed motion for partial summary judgment that the original Architect infringes claims 15-22 of U.S. Patent No. 6,498,037. (D.I. 260.)

- - - - - - - - - - - - End Footnotes- - - - - - - - - - - - - -

II. JURISDICTION

The court has jurisdiction over this matter pursuant to 28 U.S.C. § 1331 (1993).

III. BACKGROUND

Both the '349 patent and the '037 patent relate to various improvements on "an automated analyzer for conducting binding assays of various liquids, [in] particular biological fluids for substances **[*3]** contained therein." '349 patent, col. I, II. 8-11. In other words, the patents relate to improvements on an automated immunodiagnostic machine that detects the presence of various chemicals (e.g., hormones, markers of disease, etc.) in bodily fluid samples.

A. The '349 Patent

Claim 9 - the only claim of the '349 patent asserted against the redesigned Architect - describes a rotatable tray with concentric inner and outer rings of reagent container stations (i.e., reagent container holders). The rotation of the tray about its central vertical axis is driven by a first motor. In addition, the reagent container stations of the inner ring are capable of simultaneous rotation about their own respective vertical axes, independent from the rotation of the tray. That simultaneous and independent rotation is driven by a second motor in "mechanical communication" with a circular gear. The circular gear is in "mechanical communication" with satellite gears connected to each reagent container station of the inner ring. Thus, the second motor drives the circular gear, which in turn drives the satellite gears, resulting in the simultaneous rotation of each reagent container station of the **[*4]** inner ring about its own axis. The exact language of the claim reads as follows:

9. A reagent container transport mechanism, comprising:

> a tray mounted for rotation about a primary vertical axis of rotation; a plurality of inner reagent container stations disposed in a first circle on said tray, the first circle being concentric with the primary vertical axis of rotation, each of the plurality of inner reagent container stations having a respective vertical axis of rotation;
>
> a plurality of outer reagent container stations disposed on the tray in a second circle larger than said first circle, the second circle being concentric with the primary vertical axis of rotation;
>
> a circular gear disposed adjacent the tray and concentric with the first vertical axis of rotation;
>
> a satellite gear disposed in mechanical communication with each of the plurality of inner reagent container stations and with the circular gear, each satellite gear being concentric with the vertical axis of rotation of the respective inner reagent container stations;
>
> a first motor in mechanical communication with the tray for selectively rotating

the tray;

a second motor in mechanical **[*5]** communication with the circular gear for selectively rotating the circular gear and thereby rotating each of the satellite gears and the respective inner reagent container stations; and

a computer controller for selectively operating the first and second motors.

'349 patent, col. 58, II. 24-51.

B. The '037 Patent

Claims 16, 18, and 21 of the '037 patent are asserted against the redesigned Architect. All three of those claims depend from independent claim 15, which teaches a method of reading bar codes adhered to reagent containers. The reagent containers of claim 15 are disposed in two concentric rings rotatable about a common vertical axis. As the rings rotate, they pass in front of a scanning light beam capable of reading bar codes. However, because the bar code on any given reagent container may not be exposed to the reader as it passes through the light beam, the reagent containers are rotated about their respective axes in order to expose the bar code to the reader. Thus, claim 15 reads as follows:

15. A method of handling reagents in random access fashion comprising:

providing a first set of containers, each containing at least one of a first set **[*6]** of reagents, along a first circular path having an axis of rotation, each of the containers having bar code about at least a portion of its periphery which identities the reagent it contains;

providing a second set of containers along a second circular path, the second circular path being concentric with the first circular path;

rotating the first set of containers about the central axis;

scanning the bar code on one of the reagent containers of one of the first and second sets by passing a scanning light beam between two of the containers of the other of the first and second sets to determine the identity of the reagent contained therein; and

automatically rotating each reagent container of the first set about its respective axis while it is being scanned.

'037 patent, col. 58, II. 1-20.

C. The Architect

As mentioned above, Abbott denies that its original Architect infringes most of the asserted patents. Nevertheless, Abbott deemed it prudent to redesign the Architect in such a way that

it would, in Abbott's view, definitively avoid infringement of Bayer's patents. In relevant part, the original Architect has a plurality of gears disposed in a ring **[*7]** around a central vertical axis. Each of those gears drives the rotation of an individual container about its own vertical axis. The individual container gears are engaged by a much larger, ring-shaped gear (having inwardly-facing teeth) disposed around the ring. The larger ring-shaped gear is driven by a gear disposed at the end of a rotating motor shaft. Thus, when the motor shaft rotates, the gear at the end of the shaft drives the larger ring-shaped gear, which in turn drives the individual container gears, thereby causing the containers to rotate simultaneously about their respective axes. (See D.I. 306 at 6.) The original Architect also has a stationary bar code reader mounted inside the ring of reagent containers. In order to ascertain the location of each container, the ring of containers is rotated about the central axis. When a given container comes into the reader's line of sight, rotation about the central axis is paused, and the light beam from the reader attempts to locate the bar code while the containers were being simultaneously rotated about their axes. Thus, while it is not necessary to simultaneously rotate all the containers in order to read the bar code of a single **[*8]** container, the nature of the design does not permit selective rotation. Once the bar code is located, rotation about the central axis resumes until the next container comes into the reader's line of sight. (See D.I. 301 at A259 P 137.)

The redesigned Architect has essentially the same capabilities as the original Architect, however the means by which those capabilities are achieved differ to a certain extent. As to the mechanism for simultaneous rotation of the individual containers, Abbott replaced the large, ring-shaped gear with a chain similar to that found on a bicycle. Abbott also replaced the individual container gears, as well as the gear at the end of the motor shaft, with sprockets. The result is that the redesigned Architect employs roughly the same basic mechanical principles as the original Architect, but with different hardware: a sprocket (formerly a gear) at the end of a motor shaft drives a chain (formerly a ring-shaped gear) around a central axis, which in turn drives simultaneous rotation of individual container sprockets (formerly gears) around their respective axes. To put it succinctly, the only difference is that the redesigned Architect employs a chain-and-sprocket **[*9]** structure to achieve simultaneous rotation of the individual containers, whereas the original Architect employs the above-described gear structure. (See D.I. 306 at 6.)

As to the manner of searching for bar codes, the redesigned Architect, unlike the original Architect, does not continuously rotate the containers around their respective axes while the light beam from the reader is activated. Rather, the containers on the redesigned Architect are rotated around the central axis until a container enters the reader's line of sight, at which time the light beam is activated to search for that container's bar code. If no bar code is found, the light beam is deactivated and the containers are rotated about their respective axes a certain number of degrees. Rotation then pauses and the light beam is again activated to search for the bar code. The process continues until a bar code is found, or until an error message is generated. Once either of those two events occurs, rotation of the containers about the central axis resumes and continues until the next container enters the reader's line of sight. At no time do the containers on the redesigned Architect rotate about their axes while the **[*10]** light beam from the reader is activated. (See id. at B1509.) According to Abbott, these changes are sufficient to avoid the '349 patent and the '037 patent entirely. Thus, Abbott has moved for summary judgment of non-infringement as to the redesigned Architect.

IV. DISCUSSION

HN1 "Summary judgment is appropriate if, drawing all factual inferences in favor of the nonmoving party, there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law." *Chimie v. PPG Indus. Inc.*, 402 F.3d 1371, 1376 (Fed.Cir.2005). HN2 In the context of patent infringement, the court decides whether summary judgment is appropriate by first construing the disputed claim terms, and then

applying that construction to the accused product. *Id.*

A. The '349 Patent

1. Claim Construction

HN3 Claim construction is a matter of law to be decided by the court. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372, 134 L. Ed. 2d 577, 116 S. Ct. 1384 (1996). To that end, HN4 the court must begin its analysis by inquiring how a person of ordinary skill in the art at the time of the invention would have defined the disputed claim terms. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). **[*11]** "Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to 'those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean.'" *Id.* at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)).

HN5 The first and most obvious source is the claim language itself. *Phillips*, 415 F.3d at 1314. The second source is the specification, for "'it is the single best guide to the meaning of a disputed term.'" *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The third source of great value is the prosecution history. *Phillips*, 415 F.3d at 1317. HN6 It "can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise **[*12]** be." *Id.* These three sources - the claim language, the specification, and the prosecution history - constitute what is known as "intrinsic evidence." *See id.* at 1314-17. Also helpful are sources known as "extrinsic evidence," including dictionaries and expert testimony. *Id.* at 1317. However, "extrinsic evidence [is generally] less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.* at 1318. Thus, extrinsic evidence should be discounted when it is at odds with the intrinsic evidence. *See id.*

The parties' primary dispute regarding the '349 patent is the meaning of the term "gear" in claim 9, which is the only claim in that patent asserted against the redesigned Architect. As a general matter, the parties agree that a gear is "a toothed machine part, such as a wheel or cylinder, that meshes with another toothed part, to transmit motion or to change speed or direction." (D.I. 296.) However, Abbott contends that the court should construe the term to "exclude [] a sprocket and/or a chain." (Id.) Abbott argues that during prosecution, Bayer limited the invention of the '349 patent **[*13]** to the specific gear structure recited in order to secure an allowable claim. Bayer disagrees, and argues that it disclaimed nothing with regard to claim 9. Unfortunately, neither the claim language itself nor the specification is particularly instructive as to the proper construction of "gear." Therefore, the court must look to the prosecution history for guidance. *Phillips*, 415 F.3d at 1314-17.

As mentioned above, HN7 the prosecution history of a patent serves an important public-notice function because it is a written record of both the inventor's understanding of the invention, and the limitations the inventor may have placed on the invention in order to distinguish it from prior art. *See id.* at 1317. In other words, HN8 courts "refer to the prosecution history, when it is of record, to discern the applicant's express acquiescence with or distinction of the prior art as further indication of the scope of the claims." *Chimie*, 402 F.3d at 1377. HN9 "As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public's reliance on definitive statements made **[*14]** during prosecution." *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003). Nevertheless, HN10 there is "a 'heavy presumption' that claim terms carry their full ordinary and customary meaning." *Id.* at 1323.

Thus, the doctrine of prosecution disclaimer may not be invoked "where the alleged disavowal of claim scope is ambiguous." *Id.* at 1324. Rather, the "heavy presumption" can be overcome only if "the patentee unequivocally imparted a novel meaning to those terms or expressly relinquished claim scope during prosecution." *Id.* at 1323. "Consequently, for prosecution disclaimer to attach, [Federal Circuit] precedent requires that the alleged disavowing actions or statements made during prosecution be both clear and unmistakable." *Id.* at 1325-26.

In the case of the '349 patent, the original application was submitted with twelve claims of two types. Application claims 1, 3-5, 8-9, and 11 more-or-less described the physical arrangement of the reagent containers and the various axes of rotation, but did not describe the gear structure for driving the rotation of the containers. Application **[*15]** claims 2, 6-7, 10, and 12, n2 on the other hand, included the gear structure not present in the other claims. (D.I. 301 at A281-86.) Among the latter set, application claims 6, 7, and 10 described a "ring gear" for driving the satellite gears, whereas application claims 2 and 12 described a "circular gear" for driving the satellite gears.

- - - - - - - - - - - - - - - Footnotes - - - - - - - - - - - - - - -

n2 Application claim 12 was issued as claim 9 in the '349 patent.

- - - - - - - - - - - - - End Footnotes- - - - - - - - - - - - - -

In a March 2001 office action, the examiner rejected all twelve claims. Application claim 12 was rejected as being anticipated by U.S. Patent No. 5,580,524 to Forrest. (D.I. 301 atA288-95.) Figure 3 of Forrest depicts a portion of a circular arrangement of vertically-oriented cylinders (for holding reagent containers) capable of independent rotation about their respective axes. Figure 3 also depicts a wheel at the end of a motor shaft located outside the circle of cylinders, having an axis of rotation parallel to each cylinder's axis of rotation. The wheel drives rotation of each cylinder about its respective **[*16]** axis, however it is oriented such that it is in tangential contact with only one cylinder at a time. Thus, as the circle of cylinders rotates about a central axis, only the cylinder in contact with the wheel is rotated. The other cylinders remain stationary. (See id. at A 1712.) In response to the examiner's rejection, Bayer argued:

> Claims 1, 6, 8, and 12 recite the capability of simultaneously rotating the agitating assemblies and their respective reagent containers. In addition, these claims recite the structure for accomplishing this. For example, Claim 6 recites a ring gear, concentric with the primary vertical axis of rotation for the reagent tray and coupled to an agitating motor, in driving engagement with each of the satellite gears. In contrast, Forrest provides a motor 103 having a rubber wheel 101 or gear on a motor shaft 102. The rubber wheel is provided at a tangential location proximate a ring of reagent containers. Each container is spun, *one at a time,* as it passes the rubber wheel or gear.

(Id. at A307-08 (emphasis in original).)

In spite of Bayer's arguments, the examiner remained unconvinced and again rejected all twelve claims in a June 2001 **[*17]** office action. The examiner explained that Forrest incorporates by reference a European patent, which discloses additional motors for use with each cylinder, thereby enabling simultaneous rotation of the cylinders. (Id. at A327.)

Subsequently, counsel for Bayer conducted an interview with the examiner and her supervisor. Bayer summarized that interview as follows:

> Examiner Bex also indicated during this telephone call that the rejection of Claim 6 under 35 U.S.C. § 103(a) [obviousness] was being withdrawn on the basis that the cited prior art failed to disclose, teach or suggest, alone or in combination, a reagent transport apparatus in which each of plural agitating assemblies comprise a satellite gear in communication with a first reagent container holder and concentric with the vertical axis of rotation of the respective agitating assembly, and a ring gear, concentric with the vertical axis of rotation of a reagent tray, in driving engagement with each of the satellite gears, whereby rotation of the ring gear results in the rotation of each of the satellite gears about their respective axes of rotation. Thus, Claim 6 was indicated by Examiner Bex **[*18]** as being allowable. Claim 7 is also considered allowable as being dependent from Claim 6.
>
> In general, Examiner Bex indicated that the remaining independent claims would also be allowable if similar limitations with respect to the satellite and ring gears were incorporated therein. For instance, the Examiner indicated that claim 12 would be allowable if the physical relationship between the satellite gear and inner reagent container were more specifically defined.

(D.I. 301 at A340-41.)

With respect to application claim 12, Bayer amended it in the manner directed by the examiner during the interview. Importantly, that amendment did not change any of the pre-existing claim language describing the relationship between the circular gear and the satellite gears. (Id. at A347-48.) Thus, it is apparent that Bayer believed the gear structure of application claim 12 (i.e., the circular gear/satellite gear combination) to be equally as distinguishable from the prior art as the gear structure of application claim 6 (i.e. the ring gear/satellite gear combination). Moreover, after the interview, the application claims without gear structures were still rejected by the examiner as **[*19]** anticipated by Forrest. Therefore, it must have been Bayer's understanding that the gear structure, and not the simultaneous rotation of the containers about their respective axes, distinguished Forrest. In fact, Bayer went on to argue that the application claims without gear structures were distinguishable because simultaneous rotation in Forrest requires multiple motors, whereas the application claims only required one motor for that task. However, the examiner never accepted that argument. Instead, Bayer cancelled the claims not reciting the allowable gear structure, or amended them to include such a structure, in order to avoid the examiner's rejections:

> Examiner Bex indicated that she had reviewed the claims in light of the previously applied references and the newly cited references... and had come to the conclusion that at least the subject matter of independent claim 6 was allowable. In particular, Examiner Bex indicated that the references failed to anticipate the specific gear structure of claim 6.
>
> ...
>
> In light of this conclusion, and without prejudice to pursuing claims of differing scope in one or more continuing applications, claims 1-2, 10, and 13 are **[*20]** canceled herewith, and limitations similar to the gear structure recited in claims 6, 10 *or 12* are incorporated into each of independent claims 8 and 14. The

dependency of claims 3-5 has been amended to refer to claim 6.

(Id. at 372-73 (emphasis added).) n3 Once again, Bayer demonstrated its understanding that the recited gear structure of application claims 6, 10, or 12 was crucial to patentability. Also noteworthy is the fact that Bayer believed, as is demonstrated by the emphasized language above, that the circular gear/satellite gear structure of application claim 12 distinguished the prior art to the same extent as the ring gear/satellite gear structure of application claims 6 and 10.

- - - - - - - - - - - - - - Footnotes - - - - - - - - - - - - - - -

n3 Application claims 2 and 10 recited gear structure, but they were canceled nonetheless. However, the important point to note is that no claims without the gear structure remained.

- - - - - - - - - - - - - End Footnotes- - - - - - - - - - - - - -

Finally, after the examiner allowed the claims reciting gear structures, both the examiner and Bayer wrote informative explanations **[*21]** of the reasons for allowance. The examiner commented as follows:

> While the configuration of two sets of containers, both concentric about a primary axis of rotation and positioned on a rotatable tray is well-known in the art, none of the prior art specifically recite the use of a plurality of satellite gears in mechanical communication with each of the agitating assemblies holding one set of the containers. The satellite gears being concentric with the secondary axis of rotation. Additionally, the prior art fails to disclose a ring gear, concentric with the primary vertical axis of rotation, which is in mechanical communication with each of the respective satellite gears, such that rotation between the reagent tray and ring gear results in the simultaneous rotation of each of the satellite gears about their secondary vertical axis.

(Id. at A383.) Bayer then responded:

> Thus, it is [Bayer's] interpretation of the reasons for allowance that the point of novelty with respect to the cited and applied art lies in the claimed arrangement of satellite gears and a ring gear for simultaneous rotation of each of the satellite gears about a respective secondary axis of **[*22]** rotation.
>
> ...
>
> The purpose of the Interview, from the perspective of [Bayer], was to discuss the possible allowability of the present claims if specific structural elements (e.g., the ring gear and the satellite gears) were added to the independent claim not already reciting such elements. Given the urgency in prosecuting the present application..., a decision was made to preserve for another day the question of whether claims *without* such structural elements were distinguishable from the cited art.

...

In sum, it was asserted by [Bayer] that, with the selective inclusion of specific structural elements relating to a ring gear and satellite gears, the application would be allowable over the cited art.

(Id. at A386-88 (emphasis in original).) Thus, both the examiner and Bayer agreed that the specific gear structure recited in the issued claims was the reason for allowance. Once again, no distinction was drawn between the ring gear/satellite gear structure and the circular gear/satellite gear structure.

Bayer also filed patent application 10/156,849 ("the '849 application"), which is a continuation of the '349 patent. The recited gear structure in **[*23]** the '849 application claims and the recited gear structure in the '349 patent claims are nearly identical. And, similar to the '349 patent, the '849 application describes a circular gear/satellite gear structure in independent claim 1, and a ring gear/satellite gear structure in independent claim 7. Significantly, all of the claims in the '849 application were rejected in an October 2002 office action as being anticipated by U.S. Patent No. 3,151,073 ("the '073 patent") to Anthon, without regard to which gear structure (i.e., circular or ring) was employed.

Anthon describes a "centrifuging apparatus" having a chain disposed around the periphery of a ring of sprockets with which the chain is engaged. The chain is driven by another sprocket tangentially engaged with the outer side of the chain. Thus, when the drive sprocket rotates, it causes the chain to drive the rotation of each sprocket in the ring about its respective axis. (D.I. 301 at A509.) In rejecting the claims of the '849 application, the examiner explained the operation of Anthon in her own words:

Anthon teaches a circular ring gear 78 concentric with the primary vertical axis of rotation and coupled with the agitating **[*24]** motor, wherein the circular gear is rotatable by the motor and in communication with each of the satellite gears such that rotation of the circular gear about the primary axis of rotation causes each of the satellite gears to rotate about their [sic] respective secondary vertical axis simultaneously.

(D.I. 298 at A2182.) Bayer responded with the following argument:

As for both claims 1 and 7, a gear concentric with the primary vertical axis of rotation and coupled to an agitating motor is recited. The American Heritage Dictionary of the English Language, Fourth Edition, Copyright 2000, defines "gear" as "a toothed machine part, such as a wheel or cylinder, that meshes with another toothed part, such as a wheel or cylinder, that meshes with another toothed part to transmit motion or to change speed or direction." The same dictionary defines "chain" as "a connected, flexible series of links, typically of metal, used especially for holding objects together or restraining or for transmitting mechanical power." The roller chain 78 of Anthon can in no way be regarded as the same element as the recited gear.

(D.I. 301 at A448.) Thus, Bayer clearly and unmistakably **[*25]** distinguished chains from

gears, at least insofar as the claims of the '849 application are concerned. However, HN11 "the prosecution history of a related patent can be relevant if, for example, it addresses a limitation in common with the patent in suit." *Advanced Cardiovascular Sys., Inc. v. Medtronic, Inc.*, 265 F.3d 1294, 1305 (Fed. Cir. 2001). Thus, HN12 courts "presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning." *Omega*, 334 F.3d at 1334. Since the '849 application is a continuation of the '349 patent, and since there is no indication that Bayer intended "gear" to have a different meaning in the later application, the term must be construed identically in both. Consequently, the court's construction of "gear" in the '349 patent must exclude chains.

The more difficult question is whether the court's construction must also exclude sprockets. Although neither the prosecution history of the '349 patent, nor the prosecution history of the '849 application contain an explicit disclaimer of sprockets, Abbott contends that Bayer's citation to the dictionary definition of "gear" **[*26]** was sufficient to act as a disclaimer. More specifically, Abbott argues that since a sprocket meshes with a chain, and not with another toothed part, sprockets do not fit within Bayer' s dictionary definition of "gear." Bayer responds by pointing to several sources that refer to sprockets as gears. Bayer also directs the court's attention to the last sentence of its response to the rejection in light of Anthon, in which Bayer merely distinguished chains, *not* sprockets. This last point is dispositive. Excluding sprockets from the definition of "gear" requires the court to infer that Bayer explicitly relinquished sprockets because it defined "gear" as "a toothed machine part... that meshes with another toothed part," whereas sprockets mesh with chains (which allegedly have no teeth). In the court's view, that inference is too tenuous to amount to a clear and unmistakable surrender of subject matter. Thus, the term "gear" will be construed as "a toothed machine part, such as a wheel or cylinder, that meshes with another toothed part, to transmit motion or to change speed or direction, and which excludes a chain."

2. Summary Judgment

HN13 After the claim construction disputes are **[*27]** resolved, the court must evaluate whether summary judgment is appropriate. *See Chimie*, 402 F.3d at 1376. HN14 In the context of a motion brought by the alleged infringer, summary judgment will be granted if one limitation of the claim in question does not read on an element of the accused product, either literally or under the doctrine of equivalents. *See id.* at 1376-77. However, "a patentee cannot recapture through the doctrine of equivalents subject matter already precluded by the doctrine of prosecution disclaimer." *AccuScan, Inc. v. Xerox Corp.*, 76 Fed. Appx. 290, 293 (Fed. Cir. 2003) (nonprecedential). Therefore, if the accused product does not literally infringe the patent because of prosecution disclaimer, the court need not engage in a doctrine-of-equivalents analysis.

As explained above, the doctrine of prosecution disclaimer does not exclude sprockets from the scope of "gear." However, HN15 application of that doctrine is not limited to the construction of isolated terms. Rather, it can be invoked if "the patentee unequivocally imparted a novel meaning to those terms *or expressly relinquished claim scope* during prosecution." *Omega*, 334 F.3d at 1323 **[*28]** (emphasis added). Insofar as the gear structure disclosed in claim 9 is concerned, Bayer's theory of infringement is that the driving sprocket of the redesigned Architect corresponds to the circular gear, and the ring of sprockets corresponds to the circle of satellite gears. (D.I. 306 at B1066.) However, that is the precise chain-and-sprocket structure of Anthon that Bayer distinguished during prosecution of the '849 application. Thus, Bayer expressly relinquished the chain-and-sprocket *structure* of Anthon from the scope of both independent claim 1 (circular gear/satellite gear structure) and independent claim 7 (ring gear/satellite gear structure), even though it did not relinquish sprockets from the scope of the term "gear." And since HN16 courts "presume, unless otherwise compelled, that the same claim term in the same patent

or related patents carries the same construed meaning," *Omega*, 334 F.3d at 1334, Bayer disclaimed the very structure it now accuses of infringing the '349 patent. Furthermore, Bayer explicitly acknowledged during prosecution that the reason claim 9 (application claim 12) was allowable was because of "the selective inclusion of specific structural **[*29]** elements relating to a ring gear and satellite gears" (D.I. 301 at A388), which, for the purpose of patentability, is equivalent to the inclusion of a circular gear and satellite gears. Accordingly, Abbott's motion for summary judgment of noninfringement of claim 9 of the '349 patent will be granted.

B. The '037 Patent

1. Claim Construction

In the '037 patent, the parties dispute the meaning of the last limitation of claim 15: "automatically rotating each reagent container of the first set about its respective axis while it is being scanned." Bayer proposes that the phrase be construed as "automatically rotating the containers of the first set about their axes during the time that the bar codes on those containers are read." Abbott, on the other hand, proposes that the phrase be construed as "Automatically rotating each individual reagent container about its respective axis during the time its (i.e., the same container's) bar code is being read by the bar code reader." (D.I. 296.) Thus, the parties' disagreement centers around what it means to automatically rotate a container "while it is being scanned." Bayer's proposed construction is relatively broad, and literally **[*30]** encompasses devices that automatically rotate the containers at some time during the overall scanning process. In contrast, Abbott's construction is relatively narrow, and literally encompasses only those devices that continuously (and automatically) rotate the containers while the bar code reader is active.

A text search of the entire patent reveals that the word "scan" is used only in the claims, and not in the specification. Even so, "the context in which a term is used in the asserted claim can be highly instructive." *Phillips*, 415 F.3d at 1314. Although it is the last limitation of claim 15 that is at issue here, it is the second-to-last limitation that provides the instructive context:

> *scanning* the bar code on one of the reagent containers of one of the first and second sets *by passing a scanning light beam* between two of the containers of the other of the first and second sets to determine the identity of the reagent contained therein.

'037 patent, col. 58, ll. 13-17 (emphasis added). This claim language clearly and unambiguously defines "scanning" as "passing a scanning light beam." Therefore, the phrase "while it is being scanned" **[*31]** is properly construed as "while it is being passed by a scanning light beam." It does not refer to the overall process of reading bar codes, as Bayer suggests. Thus, the court will construe the last limitation of claim 15 as "automatically rotating each reagent container of the first set about its respective axis while it is being passed by a scanning light beam."

2. Summary Judgment

In its brief, Bayer asserts that "summary judgment of no literal infringement [can] be entered only if the Court not only adopts Abbott's construction as proposed, but also adopts

the further narrowed construction. . . that the 'scanning' time period encompasses only those fractions of a second when the bar code reader laser impinges on the container." (D.I. 306 at 30.) Whether or not the court's construction is co-extensive with the "further narrowed construction" described by Bayer, it is clear that Bayer admits summary judgment of no literal infringement is proper if the court's construction requires the reader's scanning light beam to be activated while the containers are being continuously and automatically rotated about their respective axes. Since that is precisely what the court's construction **[*32]** requires ("automatically rotating . . . *while* it is being passed by a scanning light beam"), Abbott's motion will be granted as to literal infringement of claims 16, 18, and 21 (which depend from claim 15) by the intermittent-rotation scheme of the redesigned Architect.

As to infringement under the doctrine of equivalents, Abbott argues that Bayer relinquished territory beyond the literal scope of its claims, i.e., the territory beyond continuous and automatic rotation while the reader is active. For support, Abbott points to several statements Bayer made in distinguishing the prior art:

> Copeland, however, fails to disclose or suggest the automatic rotation of each *individual* reagent container about its axis as it is being scanned to facilitate scanning of a bar code . . . .

(D.I. 301 at A401 (emphasis in original).)

> None of the references cited by the Examiner teach or suggest, alone or in combination, the automatic rotation of each reagent container about its axis as it is being scanned to facilitate scanning of a bar code ...

(Id. at A402.) Abbott also directs the court's attention to several similarly-worded statements Bayer made in a related **[*33]** application to the Japanese Patent Office. (See id. at A478-83.) Thus, it is Abbott's contention that Bayer's repeated use of the phrase "as it is being scanned" in distinguishing the prior art creates an argument-based estoppel that prevents Bayer from claiming infringement under the doctrine of equivalents.

Bayer responds by arguing that it was merely distinguishing prior art in which the individual containers do not automatically rotate about their own axes *at all,* without regard to whether the rotation is continuous or intermittent. Bayer directs the court to the following argument it made to the examiner subsequent to the prosecution statements pointed to by Abbott:

> The scanning of bar code or other optically scanned labels requires proper positioning of the label with respect to the scanner for accurate and complete data retrieval. If stationary containers are not properly positioned on the tray, the labels may be obscured so as to not be properly read by the scanner. Avoiding this situation requires meticulous placement of the bottles on the tray and even requires that the associated machinery be shut down in order to allow the repositioning of bottles not properly **[*34]** placed on the tray. Alternatively, special physical features, such as keying or tabs, must be provided on both the bottles and the tray to ensure proper positioning of the labeled containers on the tray to facilitate accurate label scanning.
>
> Rotation of each of the individual reagent containers about each container's respective axis of rotation, apart from the rotation of the supporting tray, obviates the need for meticulous installation of individual containers. As

previously submitted, the rotation of each container about its respective axis of rotation is not taught or suggested by any of the cited references.

(Id. at A417-18.) Abbott replies by arguing that Bayer should be held to its previous "over-argument." (D.I. 313 at 17.) Thus, even if continuous rotation was not necessary to distinguish the prior art, Abbott contends that Bayer should be estopped from recapturing the allegedly surrendered territory.

HN17 "When a court applies the doctrine of [argument-based] estoppel to limit the scope of equivalents, a close examination must be made as to, not only what was surrendered, but also the reason for such a surrender." Southwall Technologies, Inc. v. Cardinal IG Co., 54 F.3d 1570, 1580 (Fed. Cir. 1995) **[*35]** (citation omitted). "Thus, [HN18 the court] must examine the character of assertions made in the prosecution history in addition to the result of those assertions, i.e., whether they result in allowance, when determining whether they create an estoppel." *Id.* at 1583. In *Southwall,* for example, the plaintiff owned U.S. Patent No. 4,799,745 ("the '745 patent"), which describes an improved method of coating glass with a metal-oxide layer. *Id.* at 1573. The '745 patent explains that the prior art methods require a two-step process, in which the glass is first coated with the metal, and then converted to an oxide through exposure to oxygen. *Id.* at 1574. The invention of the '745 patent, on the other hand, permits the glass to be coated with a metal-oxide layer with just one step. *Id.* at 1580. In distinguishing prior art during prosecution, the plaintiff "chose not to rely on the exact method by which" the prior art formed its coating. *Id.* Rather, the plaintiff "specifically relied on the fact that [the prior art] showed a multistep process for doing so, whereas [the plaintiff] claimed a dielectric layer formed by **[*36]** a one-step process." *Id.* In the most telling passages from the prosecution history, the plaintiff explained the differences between its invention and the prior art:

> As pointed out in the specification such layers can be laid down directly by reactive sputtering processes in which the metal is sputtered off of a metal target *and directly converted to the oxide,* compound or salt by the presence of a suitable gaseous reactant [i.e., the conversion takes place in one step].

Id. at 1576 (emphasis added).

> To further emphasize the distinctions between the present invention and the [prior art,] it should be noted that [the prior art] obtains [its] metal oxide layers by depositing a metal layer *and then chemically converting it to the desired oxide* [i.e., the conversion takes place in two steps.]

Id. at 1581 (emphasis added). Although the plaintiff may have gone too far in distinguishing the prior art, the Federal Circuit held that "the limits imposed by prosecution history estoppel on the permissible range of equivalents can be broader than those imposed by the prior art." *Id.* Thus, because "the surrender **[*37]** was quite deliberate and express," the plaintiff was

estopped from arguing that the accused device, which converted in two steps instead of one, was equivalent to the patent claim at issue. *Id.* at 1580-81.

The Federal Circuit arrived at the opposite conclusion in *Eagle Comtronics, Inc. v. Arrow Commc'ns Labs., Inc.*, 305 F.3d 1303 (Fed. Cir. 2002). In that case, the plaintiff owned U.S. Patent No. 5,662,494 ("the '494 patent"), which relates to a "sealed collet assembly" that prevents moisture from entering an electrical signal filter. '494 patent, col. 1, 11. 15-18. The filter is surrounded by a housing that is substantially cylindrical in shape. *Id.*, fig. 9. Located at one end of the filter is a female receptacle for receiving an external cable or wire, over which the housing extends as well. *Id.* The "collet" is the supporting structure surrounding the receptacle, and is disposed inside the housing. *Id.* The prior art collet depicted in the '494 patent consists of two pieces, a front cap and a rear insert body. *Id.*, fig. 6. The front cap fits over the rear insert body in the same way the cap of an ink pen fits over the tip of the pen. **[*38]** During the manufacturing process, the prior art collet is inserted into the end of the housing, and an epoxy sealant is used to form a barrier between the collet and the filter. *Id.*, col. 3, 11. 22-27.

The '494 patent improves on the prior art collet by providing a non-epoxy seal, such as an O-ring, between the front cap and the rear insert body. *Id.*, col. 4, 11. 1-5. In the ink pen analogy, an O-ring would be slid over the tip of the pen (i.e., the collet's rear insert body) until it reaches what would otherwise be the stopping point for the cap (i.e., the collet's front cap). The cap would then be slid over the tip until it reaches the O-ring. The O-ring provided in the '494 patent is slightly larger in diameter than the collet assembly itself. *Id.*, col. 3, 11. 38-53. Thus, when the collet is inserted into the end of the housing, the rubber seal presses tightly against the housing, thereby eliminating the need for an epoxy sealant. *Id.*

During prosecution and on appeal, the plaintiff in *Eagle* distinguished the prior art as follows:

> The presently claimed invention is directed to an improved collet assembly, and a filter structure including such a collet **[*39]** assembly. The collet assembly includes a front cap, a rear insert body, a collet contact extension passing through the rear insert body, and a seal located between the front cap and the insert body. By providing the seal between the rear insert body and the front cap (see Figs. 7 and 8, for example), the claimed invention prevents moisture and other contaminants from entering the collet assembly and filter structure by sealing an interface between the collet assembly and the filter housing.

305 F.3d at 1310.

> The presently claimed invention has been developed to improve upon the prior art collet assembly and filter structure shown in Figs. 6 and 10, respectively. . . . According to the prior art collet assembly, a rear insert body is pressfitted with a front cap. No seal is provided between the front cap and the rear insert body. To seal the collet assembly inside housing 30, epoxy material 100 is loaded into an interior of the housing after assembly.

Id.

> The art does not suggest the particular position of the O-ring as presently claimed. Replacement of the admitted prior art epoxy with an O-ring does not provide a structure as claimed, **[*40]** wherein the O-ring is provided between the front cap and rear insert body.

Id.

The accused devices in *Eagle* were essentially the same as the invention described in the '494 patent, with the exception that the collet was made of one solid piece, rather than a front cap and a rear insert body. 305 F.3d at 1310-11. Recycling the ink pen analogy one more time, the accused devices had the same as the pen-ring-cap configuration described above, with the exception that the cap was not removable from the pen. The defendant argued that the plaintiff, in distinguishing the prior art, relinquished any equivalents not consisting of two parts, i.e., a front cap and rear insert body. *Id.* at 1315-16. The Federal Circuit disagreed:

> After reviewing the entire prosecution history here, we do not find the required clear and unmistakable surrender of subject matter to invoke prosecution history estoppel. While [the plaintiff] repeatedly distinguished the prior art by noting that the claimed seal was located between the front cap and the rear insert body, its arguments were not based on the fact that the claimed collet assembly was made of two pieces **[*41]** or were separable. Rather, those arguments were based on the prior art not teaching or suggesting the use of a seal at the interface between the collet assembly and the filter housing. The '494 patent acknowledges that the prior filter and collet assemblies applied sealant to the rear portion of the collet assembly. The improvement of the '494 patent provides a collet that self-seals at the interface between the collet assembly and the filter housing, as opposed to the rear of the collet assembly. [The plaintiff's] repeated references to the location of its seal were attempts to distinguish the claimed seal location from the location found in the prior art. [The plaintiff's] use of the specific claim language to define further the location of the claimed sealant does not amount to a surrender of seals located elsewhere along the interface between the collet assembly and the filter housing.

Id. at 1316. Therefore, because the alleged surrender was not "clear and unmistakable," the plaintiff was not estopped from accusing the defendant's one-piece collet of infringement under the doctrine of equivalents. *Id.*

The difference between the plaintiffs' arguments **[*42]** to the examiners in *Southwall* and Eagle, although perhaps subtle, is sufficiently clear to be dispositive in this case. In *Southwall*, the plaintiff essentially drew a line in the sand between the two-step processes of the prior art, and the one-step process of its invention. In contrast, the plaintiff's description in *Eagle* of the two-piece collet during prosecution was merely incidental to its description of sealing the filter with an O-ring around the collet instead of an epoxy sealant behind the collet. In the present case, there is no doubt that Bayer distinguished the prior art by pointing to the "automatic rotation of each reagent container about its axis *as it is being*

scanned." However, Bayer later clarified that the automatic nature of the rotation "obviates the need for meticulous installation of individual containers." Bayer never came close to arguing that intermittent, automatic rotation would not yield the same benefits as continuous, automatic rotation. Therefore, the court holds that Bayer did not make a clear and unmistakable surrender of subject matter in the way Abbott suggests.

Abbott also argues that Bayer is precluded from asserting the doctrine **[*43]** of equivalents by the doctrine of specific exclusion. HN19 While it is true that the doctrine of equivalents may not be used to capture subject matter "clearly excluded from the claims whether the exclusion is express or implied," *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1345 (Fed. Cir. 2001), the doctrine of specific exclusion must be applied with care, lest it be allowed to swallow the doctrine of equivalents in its entirety. Indeed, Abbott's argument does that very thing by summarily asserting that because Bayer did not write claims broad enough to literally encompass intermittent rotation, it specifically excluded that territory from the reach of the doctrine of equivalents. (D.I. 313 at 18.) If the court were to accept Abbott's argument, no plaintiff could ever invoke the doctrine of equivalents to expand the claim scope beyond what is literally claimed. For that reason, the doctrine of specific exclusion is properly invoked only in special cases, such as where the plaintiff attempts to expand the patent's claims in a way that defies logic, or in a way that encompasses the exact opposite of what is claimed. *See SciMed*, 242 F.3d at 1345-46 **[*44]** (e.g., non-metallic vs. metallic, major vs. minor, at least three lines vs. two lines, etc.). In this case, it most definitely does not defy logic to expand claim 15 to encompass intermittent, automatic rotation. As Bayer explained to the examiner, the very purpose of the invention of the '037 patent is that it "obviates the need for meticulous installation of individual containers." Automatic rotation, whether continuous or intermittent, accomplishes that goal. Thus, Abbott's specific exclusion argument is not persuasive.

Finally, Abbott argues that summary judgment should be granted because "the bar code scanning method of the redesigned Architect does not perform substantially the same function, in substantially the same way, to achieve substantially the same result as the claimed method." (D.I. 300 at 36.) More specifically, Abbott claims that the redesigned Architect performs the scanning function in a very different way than the claimed method because the redesign orients the bar code labels "through a series of small, intermittent movements, which limit[s] the overall efficiency, and flexibility of the system." (Id.) Abbott also points out that "the redesigned system required **[*45]** additional modifications (such as [an] additional bracket), and takes twice as long as the claimed method." (Id.) HN20 Generally speaking, efficiency considerations do not enter into the infringement analysis. *Insituform Techs. v. Cat Contr.*, 161 F.3d 688, 693 (Fed. Cir. 1998). But even if they did, Abbott's argument would be unavailing because it compares the efficiency of the redesigned Architect to the efficiency of the original Architect, not the efficiency of the asserted claims. Indeed, Abbott fails to point out *any* intrinsic evidence relating to efficiency or timing. As to Abbott's claim that the redesigned Architect required an additional bracket and other such modifications, the court is unable to comprehend how that is relevant because none of the claim limitations relate to brackets, or any other mundane implementation details. Therefore, because Abbott's arguments are not persuasive, and because Bayer raises disputed issues of material fact as to "function, way, result" through the report of its expert, Dr. Slocum (D.I. 306 at B1075-77), Abbott's motion for summary judgment on infringement under the doctrine of equivalents will be denied. **[*46]**

V. CONCLUSION

For the reasons discussed above, Abbott's motion for summary judgment is granted in part, and denied in part.

Dated: September 26, 2005

/s/ Gregory M. Sleet

UNITED STATES DISTRICT JUDGE

ORDER

IT IS HEREBY ORDERED THAT:

1. The term "gear," as used in claim 9 of U.S. Patent No. 6,436,349 ("the '349 patent"), be construed as "a toothed machine part, such as a wheel or cylinder, that meshes with another toothed part, to transmit motion or to change speed or direction, and which excludes a chain;"

2. The phrase "automatically rotating each reagent container of the first set about its respective axis while it is being scanned," as used in claim 15 of U.S. Patent No. 6,498,037 ("the '037 patent"), be construed as "automatically rotating each reagent container of the first set about its respective axis while it is being passed by a scanning light beam;" and

3. Abbott Laboratories' motion for summary judgment (D.I. 299) be GRANTED as to both literal infringement and infringement under the doctrine of equivalents of the '349 patent, GRANTED as to literal infringement of the '037 patent, and DENIED as to infringement under **[*47]** the doctrine of equivalents of the '037 patent.

Dated: September 26, 2005

/s/ Gregory M. Sleet

UNITED STATES DISTRICT JUDGE

EXHIBIT C

Slip Copy, 2007 WL 1056782 (N.D.Cal.)
(Cite as: Slip Copy)

H

Elantech Devices Corp. v. Synaptics, Inc.
N.D.Cal.,2007.
Only the Westlaw citation is currently available.
United States District Court,N.D. California.
ELANTECH DEVICES CORP., a corporation existing under the laws of Taiwan, R.O.C., Plaintiff,
v.
SYNAPTICS, INC., a Delaware corporation; and Averatec, Inc., a California corporation, Defendants.
No. C 06-01839 CRB.

April 6, 2007.

Sean Debruine, Akin Gump Strauss Hauer & Feld LLP, Palo Alto, CA, Hsin-Yi Cindy Feng, Ming-Tao Yang, Yitai Hu, for Plaintiff.
Karl J. Kramer, Erika Lin Labit, Robert L. McKague , Morrison & Foerster LLP, Palo Alto, CA, Damir Cefo, Elizabeth Farber Bernhardt, Karen Helene Bromberg, Cohen & Gresser LLP, New York, NY, Scott R. Raber, Kast Ner/Banchero LLP, San Francisco, CA, for Defendants.

CLAIM CONSTRUCTION ORDER

CHARLES R. BREYER, United States District Judge.

*1 Elantech Devices Corp. ("Elantech") filed suit against Synaptics, Inc. ("Synaptics") for infringement of U.S. Patent No. 5,825,352 ("the 352 patent"). Synaptics counterclaimed for infringement of U.S. Patents No. 5,880,411 ("the 411 patent"), No. 5,943,052 ("the 052 patent"), No. 5,543,592 ("the 592 patent"), and No. 6,380,931 ("the 931 patent"). The Court will construe eight claim terms selected by the parties.

BACKGROUND

I. The 411 Patent

The 411 patent, entitled "Object Position Detector With Edge Motion Feature and Gesture Recognition, " discloses a method to enable a touchpad to recognize finger contact, movement, and drag gestures, and to emulate various mouse functions. The patent was issued March 9, 1999, and by assignment, Synaptics is the owner of the entire right, title, and interest of the 411 patent.

The 411 patent contains only one of the claim terms to be construed: "incrementally move." The relevant patent claims are directed to a method for extrapolating cursor motion once the user reaches the edge of a touchpad. [FN1] The general goal of the relevant claims is to detect when the user wants to move the cursor to a position that is beyond the limited bounds of the touchpad and to move the cursor accordingly-this is called cursor "edge motion." 411 patent at 5:9-10.

FN1. The term to be construed is present in claims 40, 46, 53, and 59.

II. The 931 Patent

The 931 patent, entitled "Object Position Detector With Edge Motion Feature and Gesture Recognition, " discloses a method to enable a touchpad to recognize tap gestures and emulate various mouse functions. The patent was issued April 30, 2002, approximately three years after the 411 patent, and by assignment, Synaptics is the owner of the entire right, title, and interest of the 931 patent.

The 931 patent contains three of the claim terms to be construed: (1) "initiating a signal to the host indicating the occurrence of said tap gesture;" (2) " maintaining said signal for a predetermined period of time;" and (3) "detecting in which of at least one corner of the touch-sensor pad said tap gesture occurred." The first two claim terms are related and are generally directed to "a method for recognizing a tap gesture made on a touch-sensor pad." [FN2]

The patent claim relevant to the third claim term is directed to detecting the occurrence of a tap gesture in a particular corner. The patentee asserts that the invention allows for greater structural design flexibility and efficiency. The patentee described methods of recognizing tap gestures that were known in the prior art, and asserted that the prior art systems were slower, less intuitive for users, and more likely to cause user strain.

FN2. The first two terms to be construed are present in claims 1 and 7. The third term is present in claim 5.

III. The 352 Patent

The 352 patent, entitled "Multiple Fingers Contact Sensing Method for Emulating Mouse Buttons and Mouse Operations on a Touch Sensor Pad," discloses a method for recognizing the presence of multiple fingers on a touchpad and emulating various mouse function; the patent also discloses a touchpad with such capabilities. The patent was issued October 20, 1998, and by assignment, Elantech is the owner of the entire right, title, and interest of the 352 patent.

*2 The 352 patent contains four of the claim terms to be construed: (1) "scanning the touch sensor" or " means for scanning the touch sensor to ...;" (2) " *scanning the touch sensor to* ... identify a first maxima in a signal corresponding to a first finger;" (3) *"scanning the touch sensor to* ... identify a minima following the first maxima;" and (4) " *scanning the touch sensor to* ... identify a second maxima in a signal corresponding to a second finger following said minima." The claims are directed to " a method for detecting the operative coupling of multiple fingers to a touch sensor." [FN3] Generally, the goal of the method is to detect the presence of multiple fingers on a touch sensor and emulate mouse functions. The patentee described methods of emulating mouse functions using a touchpad that were known in the prior art, and asserted that these systems were more stressful and less intuitive than using a mouse.

FN3. The terms to be construed are present in claims 1 and 18.

DISCUSSION

I. Legal Standard for Claim Construction

Claim construction is a matter of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995), *aff'd,* 517 U.S. 370, 372, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). When construing claims, a court first looks to intrinsic evidence of record, and thereafter, if appropriate, to extrinsic evidence. *Vitronics Corp. v. Conceptronic, Inc.,* 90 F.3d 1576, 1582 (Fed.Cir.1996). Intrinsic evidence comprises the patent claims, the specification, and, if entered into evidence, the prosecution history. *Id.* Intrinsic evidence also comprises the prior art cited in a patent or during the prosecution. *Kumar v. Ovonic Battery Co.,* 351 F.3d 1364, 1368 (Fed.Cir.2003). In most cases, the intrinsic evidence alone will determine the proper meaning of the claim terms. *Vitronics,* 90 F.3d at 1583.

When construing claims, the analysis begins with, and must focus on, the language of the claims themselves. *Interactive Gift Exp., Inc. v. Compuserve Inc.,* 256 F.3d 1323, 1331 (Fed.Cir.2001). If the claim language is clear on its face, then the rest of the intrinsic evidence is considered only for whether any deviation from the plain meaning is specified. *Id.* Deviation may be warranted if, for example, the patentee has "chosen to be his own lexicographer," or if the patentee has disclaimed a certain portion of the claim scope that would otherwise be afforded by the plain meaning. *Id.* (citations omitted). Where the claim language is not clear, other intrinsic evidence is used to resolve the lack of clarity. *Id.*

Generally, a court gives the words of a claim their ordinary and customary meaning. *Phillips v. AWH Corp.,* 415 F.3d 1303, 1312 (Fed.Cir.2005) (en banc). The "ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective

filing date of the patent application." *Id.* at 1313. The context in which a word appears in a claim informs the construction of that word. *Id.* at 1314. Where there are several common meanings, the patent disclosure "serves to point away from the improper meanings and toward the proper meanings. " *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1300 (Fed.Cir.2003) (citation omitted). If more than one definition is consistent with the usage of a term in the claims, the term may be construed to encompass all consistent meanings. *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1203 (Fed.Cir.2002).

*3 Other claims of the patent in question "can also be valuable sources of enlightenment as to the meaning of a claim term." *Phillips*, 415 F.3d at 1314 . Because claim terms are normally used consistently throughout the patent, "the usage of a term in one claim can often illuminate the meaning of the same term in other claims." *Id.* The presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim. *Id.* at 1315.

Claims must be read in light of the specification. *Markman*, 52 F.3d at 979. The specification "is the single best guide to the meaning of a disputed term." *Vitronics*, 90 F.3d at 1582. Where a claim term has multiple yet potentially consistent, definitions, the rest of the intrinsic record, beginning with the specification, provides further guidance. *Brookhill-Wilk*, 334 F.3d at 1300. If the patentee explicitly defined a claim in the specification, that definition trumps the ordinary meaning of the term. *CCS Fitness v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed.Cir.2002). The specification may define a term by implication. *Phillips*, 415 F.3d at 1321. The specification may also reveal a disclaimer of the claim scope by indicating that the invention and all of its embodiments only occupy part of the broad meaning of a claim term. *SciMed Life Sys. v. Advanced Cardiovascular Sys.*, 242 F.3d 1337, 1343-44 (Fed.Cir.2001).

It is error, however, to import a limitation from the specification into the claim. *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 905 (Fed.Cir.2004). Standing alone, an embodiment disclosed in the specification does not limit the claims. *Id.* at 906. Even when the specification describes only a single embodiment, the claims of the patent are not to be construed as restricted to that embodiment unless the patentee demonstrates a clear intention to limit the claim scope using "words or expressions of manifest exclusion or restriction." *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1327 (Fed.Cir.2002). Absent clear statements of scope, courts are constrained to follow the language of the claims and not that of the written description provided by the specification. *Id.* at 1328; *see also Specialty Composites v. Cabot Corp.*, 845 F.2d 981, 987 (Fed.Cir.1988) (stating a limitation should not be read into the claims unless a specification so requires).

Conversely, a construction that excludes a preferred embodiment is "rarely, if ever, correct." *Pfizer Inc. v. Teva Pharm., USA, Inc.*, 429 F.3d 1364, 1374 (Fed.Cir.2005) (*quoting Sandisk Corp. v. Memorex Products, Inc.*, 415 F.3d 1278, 1285 (Fed.Cir.2005)). Courts require highly persuasive evidence that the claims do not encompass a preferred embodiment. *Vitronics*, 90 F.3d at 1583.

II. Construction of the Disputed Terms

The following analysis considers as intrinsic evidence the claims, the specification, and the prosecution history.

A. The 411 Patent

*4 The parties have requested the Court to construe the term "incrementally move."

1. "Incrementally move"

Claims 40, 46, 53, and 59 of the 411 patent contain the term "incrementally move." For example, claim 40 recites, in relevant part:
... generating second cursor motion signals different from said first cursor motion signals if said object has moved into said outer region of said sensing

plane, said second cursor motion signals for causing said cursor to *incrementally move* on the display screen a selected distance in a direction representing the difference between a fixed reference point on said sensing plane and said present position of said object on said sensing plane. ...

411 patent at 62:53-60 (emphasis added).

Elantech proposes a construction of "movement defined by the second component of Equations 12 and 13 in the 411 patent, namely, $S(X_{cur}-X_{center})$ and $S(Y_{cur}-Y_{center})$." Limitations in narrow claims dependent from claim 40 may not be imported into the broad language of claim 40. The limitation in dependent claim 44 sets the "fixed reference point" of claim 40 as the center of the sensing plane. Dependent claim 45 includes a speed variable in the calculation of the incremental motion of claim 40. A construction of "movement defined by the second component of Equations 12 and 13 in the 411 patent , namely, $S(X_{cur}-X_{center})$ and $S(Y_{cur}-Y_{center})$" would impermissibly import limitations from dependent claims into a broad claim.

Moreover, Elantech's very narrow construction limiting the claims to one embodiment ignores the explicit statement in the specification of the 411 patent: "[t]hose of ordinary skill in the art will recognize that a linear proportionality is described by the above equation. As used herein, ' proportionality' means that the signal generated is a monotonic function. Those of ordinary skill in the art will recognize that other monotonic functions, including but not limited to inverse proportionality, and non-linear proportionality such as logarithmic or exponential functions, could be employed in the present invention without departing from the principles disclosed herein." 411 patent at 31:29-38. This statement immediately follows an explanation of how Equations 12 and 13 might be applied within an algorithm in the preferred embodiment. 411 patent at 30:65-67-31:1-29.

The term "incrementally move" means "move in calculated increments."

B. The 931 Patent

The parties have requested the Court to construe the following three terms:
(1) "initiating a signal to the host indicating the occurrence of said tap gesture;"
(2) "maintaining said signal for a predetermined period of time;" and
(3) "detecting in which of at least one corner of the touch-sensor pad said tap gesture occurred."

The first and second terms appear together in the claims, and both are used to describe steps concerned with transmission of a signal; these terms will be analyzed together.

1. "Initiating a signal to the host indicating the occurrence of said tap gesture" and " Maintaining said signal for a predetermined period of time"

*5 Claims 1 and 7 of the 931 patent both contain the term "initiating a signal to the host indicating the occurrence of said tap gesture" and the term " maintaining said signal for a predetermined period of time." Claim 1 recites, in relevant part:
.... *initiating a signal to the host indicating the occurrence of said tap gesture* if the amount of time said conductive object is present on said touch pad is less than said reference amount of time and if the amount of motion made by said conductive object while it is present on said touch pad is less than said reference amount of motion; and *maintaining said signal for a predetermined period of time.*

931 patent at 53:4-12 (emphasis added).

For the term "initiating a signal to the host indicating the occurrence of said tap gesture," Synaptics proposes a construction of "initiating the transmission of a set of data to a computer, or other device that can take as input the output of a touch-sensor pad, that indicates that a tap gesture has occurred on the touch-sensor pad." Elantech proposes a construction of "outputting to the host a high state of a signal that has a low and a high state, where the high signal state represents that a tap

gesture occurred on the touch-sensor pad."

For the term "maintaining said signal for a predetermined period of time," Synaptics proposes a construction of "to continue, retain, or repeat the signal for a period of time that was determined before." Elantech proposes a construction of " continuously outputting the high state of the signal only for a predetermined time period (i.e., changing the signal state from high to low at the end of the predetermined time period)." In other words, Elantech asserts that a "signal" has only two states and that "maintaining" the signal can only be accomplished by continuous output of the signal, while Synaptics asserts a flexible construction of the word "signal" as "the transmission of a set of data" and that "maintaining" a signal may be accomplished in several ways.

The claims and the specification do not support a construction where a "signal" can only represent a low state and a high state. The word "signal" is used broadly throughout the 931 patent. As used in claim five, a "signal" is able to indicate both that a tap gesture occurred and *where* the tap gesture occurred. This type of complex data communication is beyond the capacity of a signal that only has a low state and a high state, and there is nothing in the claims to indicate that the word "signal" in claim five should be construed differently than the word " signal" in claims one or seven. The word "signal" is also used in other contexts throughout the 931 patent: a packetized "10-bit wide digital signal," 931 patent at 13:64-65, and "a monotonic function." 931 patent at 31:59-60. In their opposition brief, Elantech argues that every reference to the word " signal" that relates to gesture recognition refers only to the "OUT" signal described in Fig. 15a-e. However, the "OUT" signal described in Fig. 15a-e of the specification is the output of tap unit 280, which is only one component in the circuitry. *Id.* at 34:23-29. The "OUT" signal is not the ultimate signal which is sent to the host, as described in the relevant claims; it is only used to convey information about (1) the fact that a tap gesture occurred, and (2) which button click should be emulated-left, middle, or right. *Id.* at 35:26-27.

*6 There is little in the intrinsic evidence that describes exactly how a "signal" is "maintained." Nothing in the claims addresses this point, but one clue arises in the description of the flowchart that illustrates the operation of the tap unit: "[s]tep 334 also sets the Suppress flag to True to cause the virtual button signal to stay low for a short period." 931 patent at 43:1-2; Fig. 17B. The fact that setting a flag to a value of True could cause a signal to " stay low"-to maintain a particular value-"for a short period of time" indicates that there is more than one way of "maintaining" a signal. There is no evidence to support Elantech's construction that a signal is " maintained" only by continuously outputting the signal.

The term "initiating a signal to the host indicating the occurrence of said tap gesture" means "initiating the transmission of a set of data to a computer, or other device that can take as input the output of a touch-sensor pad, that indicates that a tap gesture has occurred on the touch-sensor pad." The term " maintaining said signal for a predetermined period of time" means "to continue, retain, or repeat the signal for a period of time that was determined before."

2. "Detecting in which of at least one corner of the touch-sensor pad said tap gesture occurred"

Claim 5 of the 931 patent recites, in relevant part:
... detecting in which of at least one corner of the touch-sensor pad said tap gesture occurred ...

Id. at 53:29-30 (emphasis added).

Synaptics proposes a construction of "detecting that a tap gesture has occurred in at least one corner, the identity of which is distinguished in some way from other corners of the touch-sensor pad." Elantech proposes a construction of "after detecting the occurrence of the tap gesture, separately detecting in which of at least one corner of the touch-sensor pad the tap gesture occurred." In other words, Synaptics asserts that the single event of the detection of the occurrence of the tap gesture also provides information on where the tap gesture occurred, while Elantech asserts that the detection of where the tap gesture occurred is a separate event

from the detection of the occurrence of the tap gesture.

Claim five requires that the first two detection steps be complete by the time the last step of the method is executed, since it is not possible to send a signal " indicating the occurrence of said tap gesture and in which of at least one corner of said touch-sensor pad said tap gesture occurred" unless one has already detected the occurrence of said tap gesture and detected in which of at least one corner of said touch-sensor pad said tap gesture occurred. However, there is nothing in the claim language to indicate that the two detection steps could not occur simultaneously.[FN4] Elantech argues that "[i]t would be impossible to detect in which of at least one corner of the touch-sensor pad said tap gesture occurred if the tap gesture has not previously been detected," and cites cases where an order has been imposed upon steps in a method. However, in all the cases cited there is a modifying adjective present in one step of the method that refers to an action taken in a previous step-an explicit link that requires the imposition of an order as between the two steps.[FN5] The cited cases are therefore distinguishable because in the second detection step here there is no adjective modifying the phrase "tap gesture" that refers to an action taken in the first detection step.

FN4. The specification and the figures illustrate in meticulous detail the steps involved in detecting the occurrence of a tap gesture and (assuming that it was a corner tap) detecting in which corner the tap gesture occurred. 931 patent at 42:34-44:33; Fig. 17B-C. Step 326 is where the tests are performed to determine whether a tap gesture has occurred, and step 348 is where the tests are performed to determine whether a corner tap has occurred. As described in the specification and figures, there are many interleaving steps, however, there is no way to arrive at step 348 without first proceeding through step 326. Nevertheless, an order cannot be imposed as between the two detection steps since there is no law to support such a ruling where the plain words of the claim impose no such order.

FN5. Elantech cites *Combined Sys., Inc. v. Def. Tech. Corp. of Am. and Fed. Labs.*, 350 F.3d 1207, 1210 (Fed.Cir.2003) (claim 1 of the 562 patent recites a step of *"forming folds* in said tubular sock-like projectile body" and then a step of " inserting said *formed folds* of said tubular sock-like projectile body") (emphasis added); *see also Mantech Envtl. Corp. v. Hudson Envtl. Servs., Inc.*, 152 F.3d 1368, 1376 n. 13 (Fed.Cir.1998) (where claim 1 of the 483 patent recites a step of " providing a treating flow of *acetic acid* ... into said groundwater region" and then a step of "introducing ... an aqueous solution of ferrous ion into said groundwater region, for mixing with said *acidified groundwater"*) (emphasis added).

*7 The term "detecting in which of at least one corner of the touch-sensor pad said tap gesture occurred" means "detecting that a tap gesture has occurred in at least one corner, the identity of which is distinguished in some way from other corners of the touch-sensor pad."

C. The 352 Patent

The parties have requested the Court to construe the following four terms:

(1) "scanning the touch sensor" or "means for scanning the touch sensor to ...;"

(2) *"scanning the touch sensor to* ... identify a first maxima in a signal corresponding to a first finger;"

(3) *"scanning the touch sensor to* ... identify a minima following the first maxima;" and

(4) *"scanning the touch sensor to* ... identify a second maxima in a signal corresponding to a second finger following said minima."

The latter three terms are used in the context of

scanning the touch sensor and together describe the process of recognizing the presence of one or more fingers on the touch sensor; these three terms will be analyzed together.

1. "Scanning the touch sensor"

Claims 1 and 18 of the 352 patent both contain the term "scanning the touch sensor." Claim 1 recites, in relevant part:
.... scanninghe touch sensor *to (a) identify a first maxima in a signal corres onding to a first finger, (b) identify a minima following the first maxima, (c) identify a second maxima in a signal corresponding to a second finger following said minima....*
352 patent at 16:16-20 (emphasis added).

Elantech proposes a construction of "examining information associated with the touch sensor." Synaptics contends that the phrase should be construed to mean "measuring the traces in the touch sensor and assigning them to a sequence corresponding to their physical order on the touch sensor." In other words, Elantech asserts a broad construction of "scanning the touch sensor" that is not tied to any particular touch sensor technology and that the data obtained from scanning the touch sensor need not be structured or ordered in any way. By contrast, Synaptics asserts that the "touch sensor " must be limited to capacitive devices using traces and that each capacitance value obtained from scanning the touch sensor must be associated with information representing the particular position on the touch sensor where the value was detected; Synaptics does not argue that the traces must be sensed in a sequential fashion and agrees that, as disclosed by the 352 patent, all traces may be sensed simultaneously.

There is nothing in the language of claims 1 or 18 that require a construction of a "touch sensor" that includes traces. In fact, claim 6, which is dependent from (and thus narrower than) claim 1, includes a limitation on the touch sensor "wherein said touch sensor includes a plurality of lines." Furthermore, the specification explicitly states that "[t]he present invention may be implemented based on any conventional touch sensing technology, although an exemplary embodiment involves the use of a capacitive touch sensing device." 352 patent at 2:20-24. Synaptics argues that because the parties have agreed on a construction of the term " operative coupling" to mean "electrical finger-induced effect," the claims must then be limited to methods and systems that measure such an electrical phenomenon. Although this may be true, there is no evidence that methods and systems that detect electrical finger-induced effect necessarily require traces.

*8 Elantech's construction of "examining information associated with the touch sensor," by contrast, is far too broad, as such words could be interpreted to include determining the chemical composition of the surface of the touch sensor, the manufacture date of the touch sensor, or the power consumption metrics of the touch sensor. The term " scanning the touch sensor" only appears in claims 1 and 18, and the term only appears in conjunction with the purpose of seeking to detect operative coupling. 352 patent at 16:16-20, 17:29-34. As stated in Elantech's own reply brief, the purpose of " scanning the touch sensor" is "to identify finger presence."

The term "scanning the touch sensor" means " measuring the values generated by a touch sensor to detect operative coupling and determining the corresponding positions at which measurements are made."

2. *"Scanning the touch sensor* to (a) identify a first maxima in a signal corresponding to a first finger, (b) identify a minima following the first maxima, (c) identify a second maxima in a signal corresponding to a second finger following said minima"

Claims 1 and 18 of the 352 patent both contain the three terms "identify a first maxima in a signal corresponding to a first finger," "identify a minima following the first maxima," and "identify a second maxima in a signal corresponding to a second finger following said minima." Claim 1 recites, in relevant part:

.... *scanning the touch sensor to* (a) identify a first maxima in a signal corresponding to a first finger, (b) identify a minima following the first maxima, (c) identify a second maxima in a signal corresponding to a second finger following said minima....
Id. at 16:16-20 (emphasis added).

For the term "identify a first maxima in a signal corresponding to a first finger," Elantech proposes a construction of "identify a first peak value in a finger profile obtained from scanning the touch sensor." Synaptics proposes a construction of " measuring the trace values of the touch sensor corresponding to a first finger and determining the point at which the measured values cease to increase and begin to decrease."

For the term "identify a minima following the first maxima," Elantech proposes a construction of " identify the lowest value in the finger profile that occurs after the first peak value, and before another peak value is identified." Synaptics proposes a construction of "measuring the trace values of the touch sensor following, in scan order, said minima and determining the point at which the measured values cease to decrease and begin to increase."

For the term "identify a second maxima in a signal corresponding to a second finger following said minima," Elantech proposes a construction of "after identifying the lowest value in the finger profile, identify a second peak value in the finger profile." Synaptics proposes a construction of "measuring the trace values corresponding to a second finger following, in scan order, said minima and determining the point at which the measured values cease to decrease and begin to increase."

*9 In other words, Elantech asserts that a "maxima" or "minima" represents only the maximum or minimum capacitance value measured across a finger profile; a "maxima" or "minima" does not refer in any way to the particular position[s] on the touch sensor where the maximum or minimum capacitance values appear. Synaptics asserts that a " maxima" or "minima" represents not only the capacitance measured at that one trace, but also the particular position on the touch sensor where that maximum or minimum level of capacitance was detected across the finger profile. Synaptics also asserts that within a finger profile, a "maxima" or " minima" can only appear at one precise point on the touch sensor, and so when a maximum or minimum capacitance value, as measured across a finger profile, appears at multiple traces (a plateau), the " maxima" or "minima" appears at the last trace that is included within that plateau region. Finally, Synaptics asserts that, in accordance with its construction of "scanning the touch sensor," a limitation must be imposed upon the location in which a minima following a first maxima or a second maxima following a minima may appear.

Synaptics bases its argument on the detailed mechanics of the embodiment described in the specification and in Fig. 5-6. There is support in the claims for a construction of the terms "maxima" and "minima" as data objects that have position information, as well as a capacitance value; [FN6] however, there is no support in the intrinsic evidence for a construction of either the term " maxima" or the term "minima" wherein the position information can only relate to a precise point-a single X axis value and a single Y axis value. Such a construction could twist the ordinary meaning of a "maxima" or a "minima" so as to exclude a plateau maxima, where the maximum capacitance value appears over a range of X axis values and/or Y axis values.

FN6. Claim 8 adds a step to the method of claim 1 of "comparing a distance between said first maxima and said second maxima to a predefined threshold." 352 patent at 16:41-43. Claim 10 adds the step of " detecting a distance between said first and second maxima." 352 patent at 16:57-59. Claim 15 adds the step of "determining if said first and second maxima are within 5 centimeters." 352 patent at 17:17-18-43. Claim 13 also adds a step of "detecting a movement of said first maxima." 352 patent at 17:2.

The term "identify a first maxima in a signal corresponding to a first finger" means "identify a

first peak value in a finger profile obtained from scanning the touch sensor." The term "identify a minima following the first maxima" means "identify the lowest value in the finger profile that occurs after the first peak value, and before another peak value is identified." The term "identify a second maxima in a signal corresponding to a second finger following said minima" means "after identifying the lowest value in the finger profile, identify a second peak value in the finger profile."

IT IS SO ORDERED.

N.D.Cal.,2007.
Elantech Devices Corp. v. Synaptics, Inc.
Slip Copy, 2007 WL 1056782 (N.D.Cal.)

END OF DOCUMENT

EXHIBIT D

Intamin Ltd. v. Magnetar Technologies, Corp.
C.A.Fed. (Cal.),2007.
Only the Westlaw citation is currently available.
United States Court of Appeals,Federal Circuit.
INTAMIN, LTD., Plaintiff-Appellant,
v.
MAGNETAR TECHNOLOGIES, CORP.,
Defendant-Cross Appellant.
Nos. 05-1546, 05-1579.

April 18, 2007.

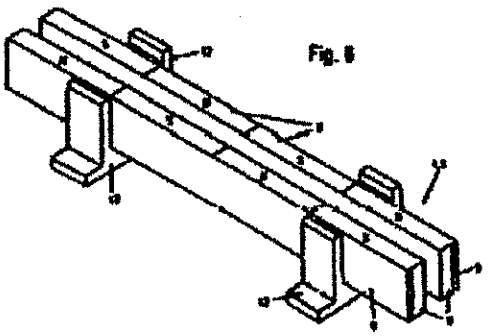
Appealed from. United States District Court for the Central District of California, Judge Gary A. Feess.

Ted S. Ward, Ward & Harrison, LLP, of Los Angeles, California, argued for plaintiff-appellant. John B. Sganga, Jr., Attorney, Knobbe, Martens, Olson & Bear, LLP, of Irvine, California, argued for defendant-cross appellant. With him on the brief were Joseph S. Cianfrani and Christopher L. Ross.

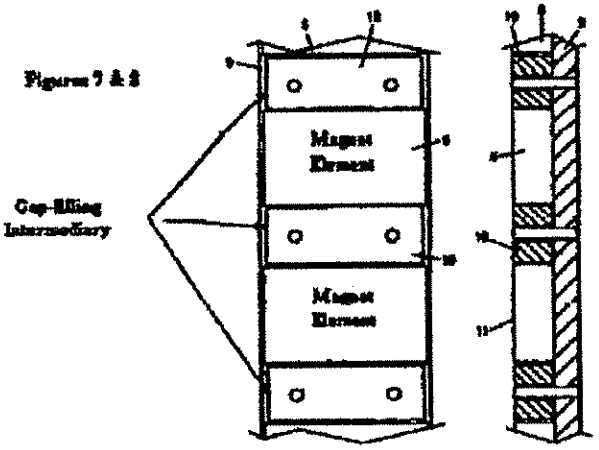
Before RADER, Circuit Judge, PLAGER, Senior Circuit Judge, and PROST, Circuit Judge.
RADER, Circuit Judge.
*1 On summary judgment, the United States District Court for the Central District of California ruled that Magnetar Technologies, Corp. (Magnetar) does not infringe Intamin, Ltd.'s (Intamin's) U.S. Patent No. 6,062,350 (the 350 patent). Intamin appeals that ruling. Magnetar appeals the district court's order vacating a previous award of Rule 11 sanctions. Upon consideration of the claim terms on appeal, this court vacates part of the district court's claim construction and remands. This court also affirms the district court's decision to vacate the Rule 11 sanctions.

I

The 350 patent, entitled "Braking System for an Amusement Device," discloses a magnetic braking system for amusement park rides such as drop towers and roller coasters. Magnetic brakes create " eddy currents" when a conductor passes through a gap between two sets of magnets. These eddy currents, in turn, create a magnetic friction that slows and stops the car attached to the conductor. The 350 patent describes specific arrangements for the conductor and the magnets. Figure 6 of the 350 patent illustrates a configuration with the adjacent magnets of opposite polarity in direct contact. The 350 specification states that "[a]ccording to Fig. 6, the polarity of the magnet elements (8) are reversed along the direction of the carrying rail." 350 patent col.4 ll.22-23.



Figures 7 and 8 of the 350 patent show gaps between magnet elements that are filled with spacers or "intermediaries."



In one embodiment in the specification, the intermediary is non-magnetic. 350 patent col.4 ll.15-18.

Magnetar sells a magnetic braking system under the name "Soft Stop" brakes. Magnetar's brakes contain magnets arranged as a "Halbach array." A "Halbach array" rotates the polarities of adjacent magnets by 90 degrees, rather than by 180 degrees as in Figure 6 of the 350 patent. By configuring the magnets in a Halbach array arrangement, Magnetar's brake creates a one-sided flux, meaning the configuration concentrates the magnetic force on one side of a magnet while nearly canceling out the magnetic force of the other side of a magnet. For example, the one-sided flux of a Halbach array is the technology behind a refrigerator magnet that sticks on only one side.

Magnetar joins the magnets into rows with epoxy, with one magnet abutting another, and places these rows of magnets into metal tubes. Then Magnetar attaches these magnetized tubes to the track. A conductive rail, or fin, is attached to the movable passenger car. Magnetar's president allegedly offered to sell Magnetar's brakes in a configuration with the fin on the track and the magnets on the passenger cars.

Intamin sued Magnetar alleging that the Soft Stop brakes infringe claim 1 of the 350 patent. Claim 1 of the 350 patent reads:

A braking device for use with an amusement apparatus having a fixed device part, at least one running rail secured to the fixed device part, and a movable device part including at least one traveling gear configured for movement along the at least one running rail, the braking device comprising:

*2 an eddy current brake assembly including:

a conducting part having at least one conductive rail configured for attachment to the fixed device part, said at least one conductive rail being adapted to extend the length of the fixed device part;

an energizing portion having at least one yoke aligned in correspondence with each said at least one conductive rails, each said yokes including a pair of yoke arms for receiving said at least one conductive rail there between;

at least one pair of carrying rails extending a predetermined distance along the direction of said at least one conductive rail, each said carrying rails being mounted on corresponding yoke arms of said plurality of yokes;

a plurality of magnet elements mounted on each of said carrying rails with alternating polarities, said plurality of magnet elements being further arranged such that the poles of magnet elements mounted on one carrying rail have opposite polarities from the poles of magnet elements mounted on a corresponding carrying rail of said at least one pair

of carrying rails; and
an intermediary disposed between adjacent pairs of said plurality of magnet elements;
wherein:
an interferric gap is defined between each said yoke arms and the at least one conductive rail, and
movement of the movable device part, relative in the fixed device part, induces eddy currents that create a magnetic brake force between said conducting part and said energizing part.

350 patent col.8 ll.29-65.

Seeking summary judgment of non-infringement, Magnetar asserted that its brakes did not infringe this claim because they did not include an " intermediary," because they were not "attached to the fixed device part," and because they did not include a "conductive rail" "adapted to extend the length of the fixed device part." The district court agreed that Magnetar's brakes did not contain an intermediary. Intamin, *Ltd. v. Magnetar Techs. Corp.*, SA CV 04-511-GLT, slip op. at 7 (C.D.Cal. Jan. 25, 2005) (*Initial Decision*). The district court further found that Magnetar's brakes could not infringe, either literally or under the doctrine of equivalents, the limitation requiring attachment to the fixed device part. *Id.* at 8-10. Finally, the district court also determined that Magnetar's Soft Stop brakes did not infringe literally a limitation requiring the conductive rail to "extend the length of the fixed device part." *Id.* at 10-12. The district court opined that Magnetar's Soft Stop brakes may infringe this limitation under the doctrine of equivalents but did not reach that issue because the absence of other limitations already showed that Magnetar's brakes did not infringe the 350 patent. *Id.* at 12-13. Thus the district court granted summary judgment of non-infringement. *Id.*

Magnetar also alleged that Intamin's complaint violated Rule 11(b). Magnetar argued that Intamin filed its complaint as retaliation for Magnetar's president's public criticism of Intamin's brakes. Magnetar also argued that Intamin's complaint was frivolous. Intamin responded that its law suit was not retaliatory and was adequately supported by pre-filing investigations. Initially, the district court granted Rule 11 sanctions. *Id.* at 13-16. Upon reconsideration, the district court affirmed its finding that Intamin filed the complaint for an improper purpose but vacated its decision that Intamin's pre-filing investigation was frivolous. *Intamin, Ltd. v. Magnetar Techs. Corp.*, SA CV 04-511-GLT, slip op. at 6-7 (C.D.Cal. Mar. 11, 2005) (*Reconsideration Decision*). Magnetar then moved for attorneys' fees. *Intamin, Ltd. v. Magnetar Techs. Corp.*, SA CV 04-511-GLT, slip op. at 2 (C.D.Cal. Apr. 25, 2005) (*Fee Decision*). In opposition to Magnetar's motion for attorneys' fees, Intamin argued that, under Ninth Circuit law, a meritorious (non-frivolous) complaint cannot have an improper purpose. *Id.* As such, Intamin argued that the district court could no longer award sanctions. *Id.* The district court agreed and vacated its sanctions. *Id.* at 2-3.

*3 As noted, the district court found on summary judgment that Magnetar's accused brake system did not infringe Intamin's patent. *Initial Decision,* slip op. at 7. Intamin petitioned for reconsideration of the court's finding of non-infringement. The district court affirmed its finding of non-infringement. *Reconsideration Decision,* slip op. at 8.
Intamin appeals the district court's grant of summary judgment of non-infringement. Magnetar cross-appeals the district court's decision to vacate the Rule 11 sanctions.

II

This court reviews a grant of summary judgment without deference. *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 149 F.3d 1309, 1315 (Fed.Cir.1998). On appeal, the parties dispute the district court's construction of the claim limitation requiring "an intermediary disposed between adjacent pairs of said plurality of magnets." The parties also dispute the district court's claim construction of a second limitation found in claim 1 of the 350 patent: "said at least one conductive rail being adapted to extend the length of the fixed device part." Like summary judgment itself, this court reviews claim construction without deference. *Cybor Corp. v. FAS Techs. Inc.*, 138 F.3d 1448, 1456 (Fed.Cir.1998) (en banc).

Regarding the limitation requiring an "intermediary, " the dispute rests on whether the intermediary between adjacent pairs of magnets can itself be a magnet. The use of the word "said" in a claim refers to an earlier use of the term in the claim. *See Bell Commc'n Research, Inc. v. Vitalink Commc'n Corp.*, 55 F.3d 615, 621 (Fed.Cir.1995). Here, the claim proceeds from the following definition: "a plurality of magnet elements mounted on each of said carrying rails with alternating polarities, said plurality of magnet elements being further arranged such that the poles of magnet elements mounted on one carrying rail have opposite polarities from the poles of magnetic elements mounted on a corresponding carrying rail of said at least one pair of carrying rails." 350 patent col.8 ll.49-55. Thus, according to claim 1, the magnets surrounding the intermediary have at least "alternating" polarities.

Intamin argues that adjacent pairs of magnets with alternating polarities must mean two magnets on the same rail with *opposite* polarity, as shown in Figure 6 of the 350 patent. Thus, according to Intamin, anything between the magnets of opposite polarity is an intermediary, whether magnetic or not. Magnetar argues that "adjacent pairs of magnets" means any two magnets next to each other or abutting each other on the rail, as shown in Figure 6. Further, according to Magnetar, the term " alternating" does not require that such magnets have opposite polarity as shown in Figure 6. Thus, because adjacent magnets are any two magnets abutting each other on a single rail, Magnetar argues that another magnet cannot be an intermediary. Under its interpretation, Magnetar's Soft Stop brakes would not infringe claim 1 because they lack an intermediary.

*4 The district court construed the term " intermediary" without determining the meaning of " adjacent magnets with alternating polarities." The parties disagree therefore about the meaning the district court actually gave to the term " intermediary." Intamin argues that the district court determined that the intermediary could not be magnetic, thus precluding infringement. Magnetar disagrees that the district court made such a determination.

In any event, the parties agree that this court cannot interpret "intermediary" without addressing the polarities of the adjacent magnets. Specifically, an intermediary cannot be another magnet if this court construes "adjacent pairs of magnets" as two magnets abutting each other with polarities that alternate at some degree such as found in a Halbach array. In other words, an intermediary can only be a magnet if the limitation "alternating polarities" means "opposite polarities." Under that interpretation, some magnets become "adjacent pairs " and other magnets in between become " intermediaries." In addition, "adjacent pairs of magnets" with opposite polarities, as in Figure 6, would need some separation.[FN1] Intamin argues that another magnet can provide this separation.

The district court adopted Magnetar's proposed claim construction: "In short, ordinary meaning supports Defendant's construction, and neither the specification nor the prosecution history changes the ordinary meaning." *Initial Decision,* slip op. at 4. On its face, the district court construed the term " intermediary" to mean "a member between others." *Id.* at 3-4. In reaching that conclusion, the district court dismissed Intamin's proposed claim construction that the intermediary can be a magnet between two other magnets. *Id.* In fact, the trial court specifically points to language in the patent that the intermediary is non-magnetic. *Id.* Thus, the district court apparently construed the term " intermediary" to mean something non-magnetic between the adjacent magnets.

The first step in an infringement analysis is the determination of the scope of the claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). This court construes claims according to the principles set forth by this court in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed.Cir.2005) (en banc). As such, the court consults primarily the claims themselves in context, with much of that context supplied by the specification and the prosecution history. *Id.* at 1312.

In this case, the claim language itself does not require a non-magnetic "intermediary." Just as in

the *Phillips* case itself, the claim uses a broad term with an understandable meaning. As the district court noted, the term "intermediary" standing alone means a "member between others." *Initial Decision,* slip op. 4. This term takes on additional meaning, however, in the context of magnetized members. The context of the rest of the patent helps show that additional meaning, namely whether the intermediary may be magnetic.

***5** In *Phillips,* this court noted that dependent claims can supply additional context for construing the scope of the independent claims associated with those dependent claims. 415 F.3d at 1314. An independent claim impliedly embraces more subject matter than its narrower dependent claim. In this case, dependent claim 2 modifies the term " intermediary." Claim 2 of the 350 patent discloses " [t]he braking device of claim 1 wherein said intermediary is non-magnetic." This dependent claim shows both that the claim drafter perceived a distinction between magnetic and non-magnetic intermediaries and that independent claim 1 impliedly embraced magnetic intermediaries. *See Innova/Pure Water, Inc. v. Safari Water Filtration Sys. Inc.,* 381 F.3d 1111, 1123 (Fed.Cir.2004).

The district court initially did not consider the context supplied by claim differentiation because Intamin did not raise this argument until reconsideration. *Reconsideration Decision,* slip op. at 2. Even without the enlightenment supplied by claim differentiation, however, the overall context of claim 1 does not limit the broad language to non-magnetic intermediaries. At one point, the 350 patent describes an embodiment of the invention with a "non-magnetic" intermediary. 350 patent col.4 ll.16-18. The district court seized on this disclosure to limit the term "intermediary" to nonmagnetic substances only. *Initial Decision,* slip op. at 4. As this court has repeatedly noted, *see SRI Int'l v. Matsushita Electric Corp.,* 775 F.2d 1107, 1121 (Fed.Cir.1985) (en banc) (plurality opinion), a narrow disclosure in the specification does not necessarily limit broader claim language. *Phillips,* 415 F.3d at 1323. The overall context of the patent, in this case, does not specifically disavow magnetic intermediaries. *See e.g., SciMed Life Sys. Inc. v. Advanced Cardiovascular Systems* Inc., 242 F.3d 1337, 1341 (Fed.Cir.2001). The single reference does not expressly limit the entire invention but only describes a single embodiment. Moreover, the term "intermediary," like the term "baffle" in *Phillips,* embraces more than the limited specification disclosure.

Thus, this court finds that the term "intermediary" can embrace magnetic substances, albeit only if the additional term requirement of "alternating polarity" allows for it. Accordingly, this court vacates the district court's construction of this term. However, this court has not reached an additional question on which the trial court has yet to provide a decision for review. Specifically this court remands to permit the district court to determine whether the patent limits the term "adjacent magnets of alternating polarity" to magnets of *opposite* polarity. With the understanding that an "intermediary" may be magnetic, the trial court may revisit its finding of non-infringement.

The district court also construed the limitation of a " conductive rail being adapted to extend the length of the fixed device part" to mean the conductive rail must run the end length of the track to which it is attached. *Initial Decision,* slip op. at 10. Specifically, the district court construed the term " length" to mean "extent from end to end-distinguished from width." *Id.* In other words, the district court applied the ordinary meaning to the term "length" and found that the plain meaning of the term referred to the full length of the fixed device part. *Id* . at 12. In the patent's roller coaster embodiment, this limitation would require the conductive rail to extend the entire length of the roller coaster.

***6** In the claim, the "fixed device part" refers to the framework of the amusement device, i.e., the track for the roller coaster or tower drop. The " conductive rail" refers to a metal rail, part of which will have a conductive coating. The rail and the coating make up the conductive part. This " conductive part," in turn, passes through the array of magnets to generate the braking force or vice versa, depending on the configuration. This court must determine the meaning of "length" as a reference to the full length of the fixed device part,

as the district court construed, or to the direction or orientation of the conductive rail.

The claim language uses the term "length" in the context of a longer phrase: "adapted to extend the length of the fixed device part." The verb "extend" already suggests that the "length" reaches from one end to another. Moreover, the term "length" imparts information about the "fixed device part," once again suggesting that the "length" will encompass the entire dimensions of that structure. In sum, the claim term "length" in context in the claim encompasses the full length of the fixed device part, as the district court correctly discerned.

The district court further recognized that the specification nowhere uses "length" to refer to direction or orientation. *Initial Decision,* slip op. at 11-12. Rather, the district court found correctly that the term referred to the entire length of the fixed device part. *Id.* at 12. The patent specification uses " length" consistent with its meaning as a distance, rather than merely a direction. Thus, the context supplied by the specification underscores the meaning of claim 1 of the 350 patent that expressly states that the conductive rail extends the length of the fixed device part.

For example, the 350 patent uses the term "length" to discuss the braking distance. 350 patent col.2 l.13; col.4 l.66. It also uses the term to refer specifically to the length of the magnetic elements. 350 patent col.5 ll.32, 34, 41-42. Both uses of " length" consistently refer to distance or dimension, quantitative applications of the term "length." In comparison, when the 350 patent references a direction as opposed to a distance, it uses language such as "along drop directions." 350 patent col.3 ll.36-38 ("Both the energizing and conducting parts (5, 6) are designed in the form of a rail and stretch along the drop directions.").

Intamin argues that the intrinsic evidence supports its proposed claim construction because when the inventors were trying to convey an entire distance, they used a modifier such as "whole height." 350 patent, col.7 ll.37-40; col.4 ll.31-34. While Intamin argues that no modifier requires the length to extend the entire length of the fixed device part, the flip side of this argument also applies: no modifier instructs one skilled in the art to interpret the phrase as extending to only part of the fixed device. Thus, the context and word choice of the claim language itself establishes that "extend the length" means the length of the fixed device part. In other words, the intrinsic evidence confirms the meaning conveyed by the claim language.

*7 Intamin argues that this interpretation would not permit the claim to read on embodiments of the invention specifically mentioned in the patent specification. For example, the patent discloses a roller coaster-type embodiment where the passenger car or movable device houses the conductive part. Under the proper claim construction with the conducting rail extending the length of the fixed device, the claim may well not cover this embodiment. Nonetheless, this court has acknowledged that a claim need not cover all embodiments. *See Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1326 (Fed.Cir.2001)("We conclude that only those embodiments involving communications established by the host processor meet the functional requirement of the claim."); *see also Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324-25 (Fed.Cir.2003); *Phillips Petroleum Co. v. Huntsman Polymers Corp.*, 157 F.3d 866, 875 (Fed.Cir.1998). A patentee may draft different claims to cover different embodiments.

In addition, Intamin argues that the proper claim interpretation would render another claim, dependent claim 10, invalid. Dependent claim 10 addresses the embodiment where the conductive portion is connected to the movable device. With claim 1 specifying that the conductive rail extends the length of the fixed device, dependent claim 10 may well be improper. Thus, Intamin urges this court to construe claim 1 to retain the validity of claim 10. Under the proper construction of claim 1, dependent claim 10 erases entirely a limitation of the fixed device part and is thus an improper dependent claim. Of course, dependent claim 10 has that effect under any reading of "length" in claim 1. Because claim 1 requires the conductive portion to reach the length of the fixed device part and claim 10 places the conductive portion on the passenger

car, claim 10 is an improper dependent claim. Thus, construing claim 1 to mean end to end length does not in itself render claim 10 invalid. In any event, the claim construction of claim 10 is not before this court. Thus, this court considers but gives no weight to Intamin's argument relative to claim 10.

Given this construction, the district court initially determined that Magnetar's Soft Stop brakes did not infringe because they placed the conducting rail on the passenger car. *Initial Decision,* slip op. 12. The district court determined it could not find on summary judgment that Magnetar's brakes would not infringe this limitation under the doctrine of equivalents. *Id.* However, the district court granted summary judgment to Magnetar because it determined that Magnetar did not contain an intermediary. *Id.* at 13. Intamin requested reconsideration and the district court determined that there was a triable issue as to whether Magnetar's brake system can be configured such that the conducting rail was attached to the track. *Reconsideration Decision,* slip op. at 4. Thus, this court remands to the district court for a determination of whether Magnetar's brakes would infringe this limitation, either literally or under the doctrine of equivalents.[FN2]

III

***8** Magnetar cross appeals the district court's denial of Rule 11 sanctions against Intamin. *Fee Decision,* slip op. at 2-3. This court reviews a district court's decision regarding Rule 11 sanctions for an abuse of discretion. *Cooter & Gell v. Hartmarx Corp.,* 496 U.S. 384, 405, 110 S.Ct. 2447, 110 L.Ed.2d 359 (1990). Further, this court applies the law of the regional circuit in its review, *Antonious v. Spalding & Evenflo Cos.,* 274 F.3d 1066, 1072 (Fed.Cir.2002), which in this case is the Ninth Circuit.

Rule 11 of the Federal Rules of Civil Procedure imposes a duty on attorneys to certify by their signature that the pleading or motion is well-grounded in fact, has a basis in law, and is not filed for an improper purpose. *View Eng'g, Inc. v. Robotic Vision Sys.,* 208 F.3d 981, 984 (Fed.Cir.2000). Under Ninth Circuit law, "sanctions must be imposed on the signer of a paper if either a) the paper is filed for an improper purpose, or b) the paper is 'frivolous.' " *Townsend v. Holman Consulting Corp.,* 929 F.2d 1358, 1362 (9th Cir.1990) (en banc). With regard to complaints, the Ninth Circuit law finds that "complaints are not filed for an improper purpose if they are non-frivolous." *Id.* at 1362. Finally, "[t]he Ninth Circuit defines a 'frivolous' claim or pleading for Rule 11 purposes as one that is 'legally or factually "baseless" from an objective perspective ... [and made without] a reasonable and competent inquiry.' " *Q-Pharma, Inc. v. Andrew Jergens Comp.,* 360 F.3d 1295, 1299 (Fed.Cir.2004) (citing *Christian v. Mattel, Inc.,* 286 F.3d 1118, 1127 (9th Cir.2002)).

On appeal, Magnetar argues that Intamin did not conduct a good faith investigation of Magnetar's Soft Stop brakes before filing its complaint. This court must therefore determine whether the district court abused its discretion when it found upon reconsideration that Intamin had conducted a reasonable and competent inquiry at the time it filed its infringement complaint.

Magnetar argues on appeal that Intamin's pre-filing investigation was insufficient because it did not obtain and physically cut open the metal casing on the magnets in Magnetar's brake system. The record shows that Magnetar's system encased the magnets in metal tubes. Accordingly, a visual inspection would not disclose the orientation of the magnets within the tubes. In *Judin v. United States,* 110 F.3d 780, 784 (Fed.Cir.1997), this court held that the district court abused its discretion in not granting Rule 11 sanctions against a patentee who failed to obtain a sample of the product as part of its pre-filing investigation. However, *Judin* did not create a blanket rule that a patentee must obtain and thoroughly deconstruct a sample of a defendant's product to avoid violating Rule 11. Rather, in *Judin,* the patentee could have easily obtained a sample of the accused device (a bar code scanner) for a nominal price from the post office. In this case, the technology presented the patentee with unreasonable obstacles to any effort to obtain a sample of Magnetar's amusement ride brake system, let alone the difficulty of opening the casing.

*9 In lieu of cutting open the casing, Intamin might have tested a Magnetar device for magnetic polarities. In *Q-Pharma,* however, this court did not impose on a patentee a Rule 11 obligation to perform a simple chemical test on a sample to determine its composition. 360 F.3d at 1302. Instead, this court found that the patentee satisfied its Rule 11 obligations with other reasonable pre-filing inquiries. *Id.* Here, the district court determined: "In light of the other information [Intamin] had at the time of filing ... [its] pre-filing inquiry was reasonable." *Reconsideration Decision,* slip op. at 7. In particular, the district court noted that Intamin "evaluated the patent portfolio, analyzed the patent's validity, determined the scope of the patent's claims, and performed an infringement analysis." *Id.* The district court further determined that Intamin "reviewed publicly available documents on [Magnetar's] brakes, inspected [Magnetar's] brakes as installed on a roller coaster, took photos of the brakes, and reviewed the brakes with experts." *Id.* Thus the district court determined that Intamin's pre-filing inquiry was reasonable under the circumstances. *Id.* This court discerns no abuse of discretion in the district court's determination.

IV

In conclusion, this court vacates part of the district court's claim construction as discussed above and remands the decision of non-infringement for further consideration. Finding no abuse of discretion, this court affirms the district court's decision to vacate its previous finding of Rule 11 sanctions.

COSTS

Each party shall bear its own costs.

AFFIRMED-IN-PART, VACATED-IN-PART, and REMANDED.

FN1. At oral argument, Intamin's counsel, in response to a question regarding the meaning of and the necessity for an " intermediary," stated that "the intermediary serves the purpose to provide spacing and support for the magnets of the magnet elements which are the magnets of alternating polarity [because] for physics reasons there has to be spacing between those two magnets of alternating polarities and also the magnets are so strong that if there in not something in between they tend to spin into a new location." Thus, whether another magnet can be an intermediary may depend on whether it can serve as a spacing and support element. Arguably, none of Magnetar's magnets are used as spacing and support elements; rather, all are necessary to create the one-sided flux of the Halbach array.

FN2. The parties in this appeal discuss additional claim limitations that were not construed by the district court. This court encourages the district court to consider all of the limitations of claim 1 of the 350 patent on remand.

C.A.Fed. (Cal.),2007.
Intamin Ltd. v. Magnetar Technologies, Corp.
--- F.3d ----, 2007 WL 1138489 (C.A.Fed. (Cal.))

END OF DOCUMENT